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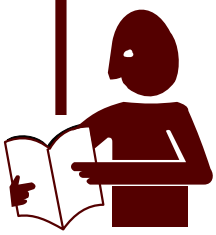
SUPPLEMENTAL SERVICE INSTRUCTIONS

WVOC-4HF and WVOC-4HS

CONVECTION OVEN and HOTPLATE COOKTOP with VENTLESS HOOD SYSTEM



IMPORTANT: WELLS BLOOMFIELD, LLC PROPRIETARY INFORMATION. DISSEMINATION OF THIS INFORMATION TO ANYONE OTHER THAN WELLS AUTHORIZED SERVICE AGENTS IS STRICTLY PROHIBITED. TECHNICAL CONTENT OF THIS MANUAL IS DESIGNED FOR USE BY QUALIFIED PROFESSIONAL TECHNICIANS ONLY.

PRINTED IN UNITED STATES OF AMERICA

WARNING: RISK OF INJURY

Installation procedures must be performed by a qualified technician with full knowledge of all applicable electrical and plumbing codes. Failure can result in personal injury and property damage.

WARNING: ELECTRIC SHOCK HAZARD

All servicing requiring access to non-insulated electrical components must be performed by a qualified technician.
Some procedures involve exposed live circuits. Use all due caution to avoid contact with live electric circuits. Failure to follow this warning can result in severe electrical shock.

WARNING SLIP / FALL HAZARD SPILLED OIL

DO NOT OPERATE UNLESS THE GREASE CUP AND TROUGH ARE INSTALLED. Oil and moisture will drip onto the floor and falls may result. Death or serious injury may result from slipping and falling

CAUTION: RISK OF DAMAGE

DO NOT connect or energize this appliance until all installation instructions are read and followed. Damage to the appliance will result if these instructions are not followed.

This appliance is intended for use in commercial establishments only.

This appliance is intended to prepare food for human consumption. No other use is recommended or authorized by the manufacturer or its agents.

Operators of this appliance must be familiar with the appliance use, limitations and associated restrictions. Operating instructions must be read and understood by all persons using or installing this appliance.

Cleanliness of this appliance is essential to good sanitation. Read and follow all included cleaning instructions and schedules to ensure the safety of the food product.

Disconnect this appliance from electrical power before performing any maintenance or servicing.

DO NOT splash or pour water on, in or over any controls, control panel or wiring. Do not use water spray or steam jet to clean this appliance. This appliance is not jet stream approved.

The technical content of this manual, including any wiring diagrams, schematics, parts breakdown illustrations and/or adjustment procedures, is intended for use by qualified technical personnel.

Any procedure which requires the use of tools must be performed by a qualified technician. All service to the fire suppression system must be performed by an authorized Ansul® agency.

This appliance is made in the USA. Unless otherwise noted, this appliance has American sizes on all hardware.

IMPORTANT INSTALLATION NOTE:

6” clearance is required from back and sides of the appliance to any combustible or non-combustible surface.

This installation requires a minimum ceiling height of 96" in order to maintain adequate airflow.

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SPECIFICATIONS

MODEL	VOLTS	WATTS	AMPS 3ø			AMPS 1ø
			L1	L2	L3	
WVOC-4HF	208	11,500	32	31	26	55
	240	14,100	36	35	30	59
WVOC-4HS	208	13,300	39	38	34	64
	240	16,500	41	40	39	69

INTRODUCTION

This manual contains information needed to properly service and repair Wells Bloomfield convection oven and hotplate cooktop with ventless hood system. This manual applies to the following Wells models:

WVOC-4HF
WVOC-4HS

For installation, operation and maintenance instructions, refer to Operation Manual p/n 304964.

FEATURES & OPERATING CONTROLS

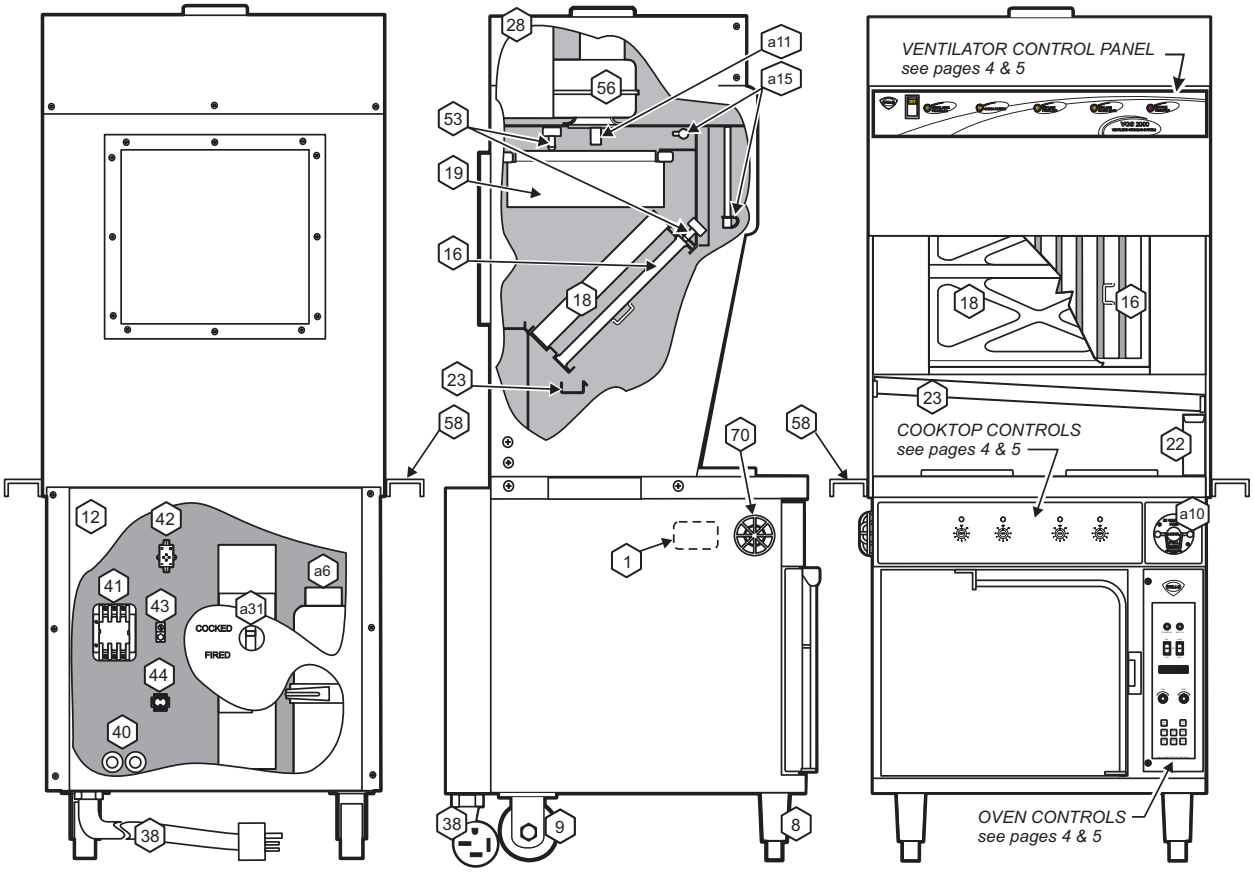


Fig. 1 Ventilator Section Features & Operating Controls

VENTILATOR SECTION

ITEM	DESCRIPTION	COMMENT
1.	NAMEPLATE	Gives Manufacturer, Model and Serial Number information. Also lists electrical specifications.
a6.	FIRE SUPPRESSION AGENT TANK (1.5 gal.)	Container for Ansulex™ Low-pH liquid fire suppression liquid.
8.	ADJUSTABLE (FRONT) LEG	Allows the unit to be leveled.
9.	RIGID (REAR) CASTER	Allows the unit to be easily positioned by lifting the front of the unit slightly.
a10.	MANUAL PULL STATION	Provides a means of manual activation of the fire suppression system. PULL ONLY IN CASE OF FIRE!
a11.	FUSIBLE LINKS	Automatically activates fire suppression system in the event of fire on the cooktop.
12.	LOWER REAR ACCESS PANEL	Allows access to Ansul® fire suppression agent tank (a6) and controls also access to main power contactor (41).
a15.	DISCHARGE NOZZLE	Fire suppression media discharges here (2 places).
16.	GREASE BAFFLE	Extracts and drains most grease and moisture from the air flow.
18.	PRE-FILTER ASSEMBLY	Comprises the PRE-FILTER FRAME and a replaceable PRE-FILTER. Stops larger particles of grease from reaching the FILTER PACK for reduced maintenance costs.
19.	HEPA/CHARCOAL FILTER PACK	Stops most grease and smoke particles. Also assists in some cooking odor removal.
22.	GREASE CUP	Collects grease/moisture drained from grease trough (23).
23.	GREASE TROUGH	Directs grease/moisture removed by grease baffle to grease cup.
28.	VENTILATOR EXHAUST DUCT	Exit point for ventilator airflow - on top left rear of unit. **DO NOT BLOCK**
a31.	STATUS INDICATOR	Displays status of fire suppression system (*COCKED* - *FIRED*) If *FIRED*, a buzzer will sound continuously.
38.	POWER CORD	6' cord and cap. Plug for NEMA 15-60R (receptacle by user).
40.	FUSES	Provide over-current protection of cooking appliance.
41.	POWER CONTACTOR	Energizes cooktop only while ventilator section is sensed as operational.
42.	BUILDING FIRE ALARM RELAY	Reports fire alarm condition to building fire management system.
43.	GROUND LUG	Ground wire of power cord connects here.
44.	INTERLOCK TERMINAL	Provides connection for shut-down control by building fire management system.
53.	FILTER INTERLOCK SWITCHES	Proper installation of grease baffle and filter pack close these switches in ventilator sensor circuit. Provides air movement for ventilation.
56.	VENTILATOR FAN	Provides air movement for ventilation.
58.	SIDE SPACERS	Maintain required 6: spacing from combustible surfaces.
70.	COOLING FAN	Provides cooling for cooktop controls.

FEATURES & OPERATING CONTROLS (continued)

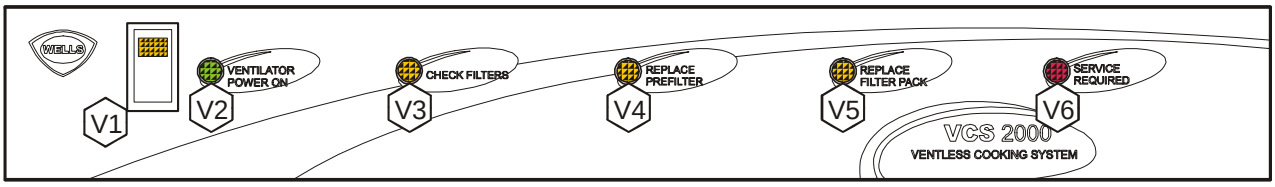


Fig. 2 Ventilator Section Controls & Indicator Lights

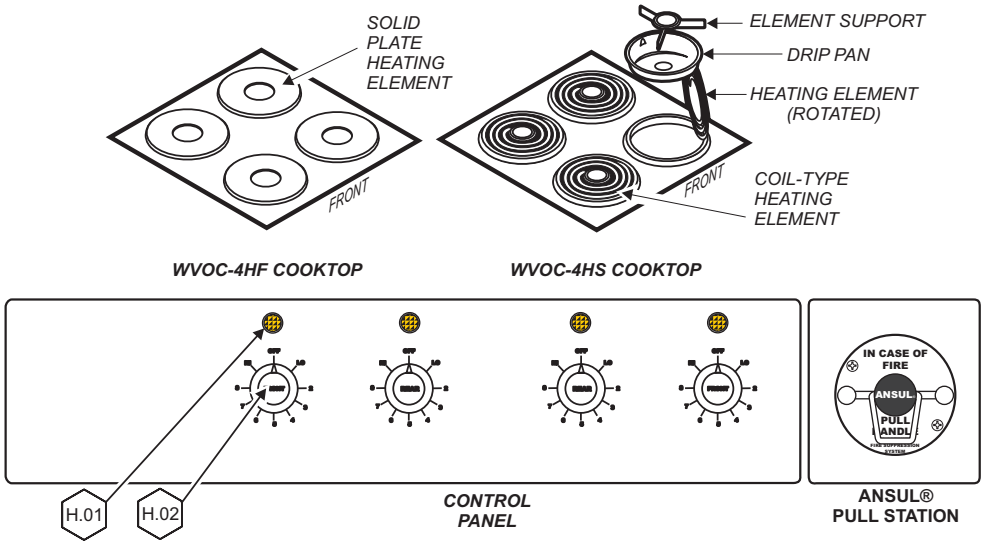


Fig. 3 Cooktop Section Controls & Indicator Lights

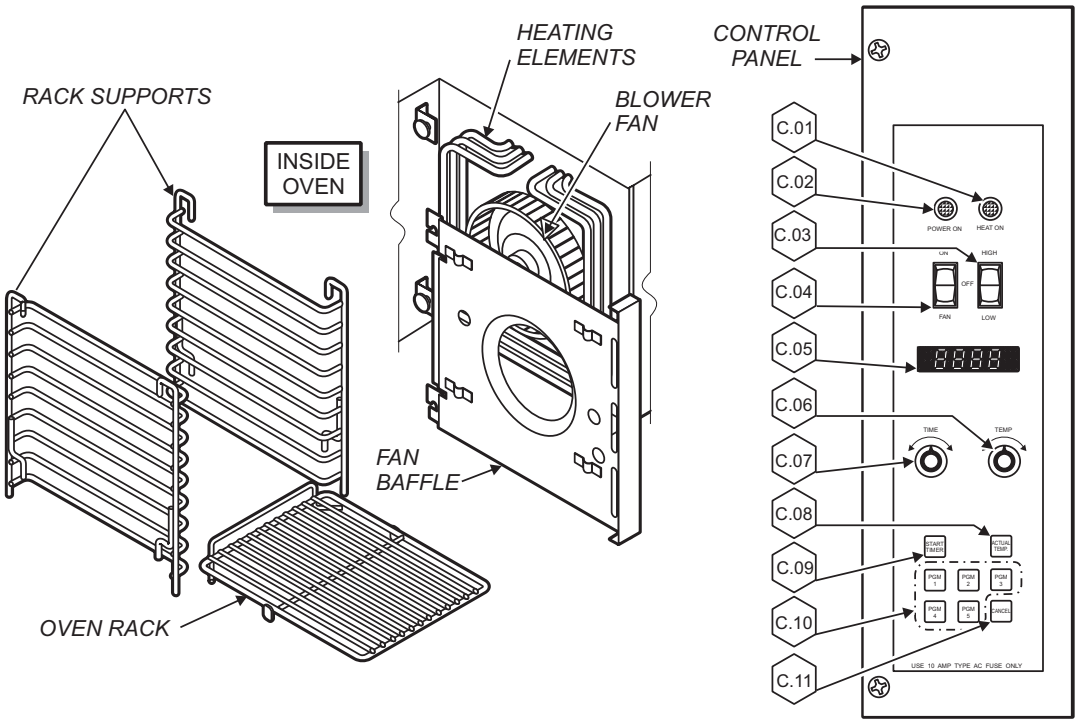
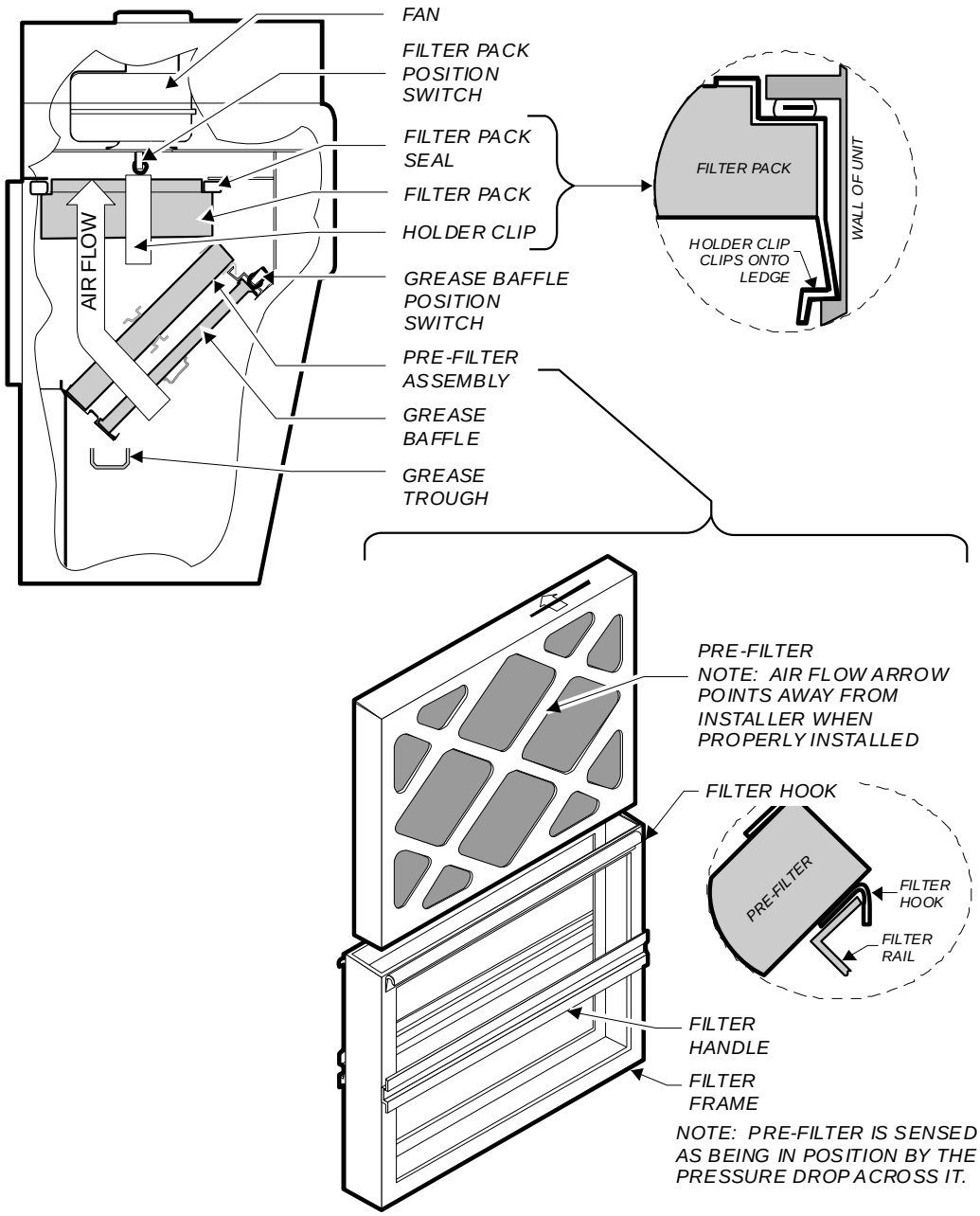


Fig. 4 Convection Oven Features & Operating Controls

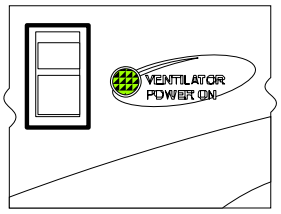
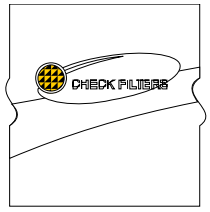
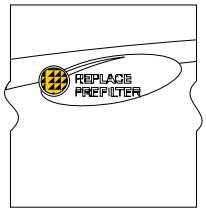
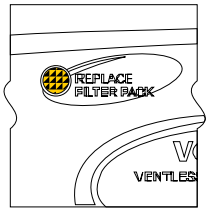
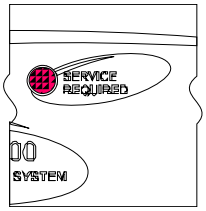
ITEM	DESCRIPTION	COMMENT
VENTILATOR SECTION CONTROLS		
V1	POWER SWITCH	
V2	POWER *ON* INDICATOR	**Energizes blower motor. If, after 10 seconds, proper conditions are met, cooktop is energized.**
V3	*CHECK FILTERS* ALARM INDICATOR	GREEN. Glows when POWER switch is *ON.*
V4*	*REPLACE PREFILTER* ALARM INDICATOR	AMBER. Glows if one or more filters are out of position. Check all filters and baffles for proper installation.
V5*	REPLACE FILTER PACK ALARM INDICATOR	AMBER. Glows when PREFILTER is approaching the end of its service life and must soon be replaced.
V6*	SERVICE REQUIRED ALARM INDICATOR	AMBER. Glows when FILTER PACK is approaching the end of its service life and must soon be replaced. RED. Glows when PREFILTER and/or FILTER PACK has reached the end of its service life and is too loaded to allow sufficient air flow. Filter MUST be replaced. Appliance is *SHUT DOWN* until expended filters are replaced.
COOKTOP SECTION CONTROLS		
H.01	POWER ON INDICATOR	AMBER. Glows when associated temperature control is turned *ON.*
H.02	HOTPLATE CONTROL	Infinite switch control of temperature of one hotplate section.
CONVECTION OVEN SECTION CONTROLS		Switch to turn oven *ON, OFF*, or select *FAN* only.
C.01	POWER-OFF-FAN SWITCH	Switch to turn fan *ON*, and to select fan speed.
C.02	FAN LOW-OFF-HIGH SWITCH	AMBER. Glows when oven is turned *ON*.
C.03	OVEN POWER INDICATOR	AMBER. Glows when heating elements are energized.
C.04	HEAT INDICATOR	Displays time and temperature information. A. Time remaining in program (minute : second) B. Programmed temperature (ºF)
C.05	DIGITAL DISPLAY	Adjust programmed cooking time.
C.06	OVEN *TIME* CONTROL	Adjust programmed cooking temperature.
C.07	OVEN *TEMP* CONTROL	Begin a timed cook cycle.
C.08	*START TIMER* KEY	Press to display current oven temperature.
C.09	*ACTUAL TEMP* KEY	Press to select pre-programmed time/temperature.
C.10	*PGM* KEYS	Press to cancel a program in progress.
C.11	*CANCEL* KEY	

* See *PRECAUTIONS & GENERAL INFORMATION*, page 8 for special procedures regarding prefilters and filter packs.

HOOD OPERATION - FILTER ARRANGEMENT



HOOD OPERATION - SERVICE INDICATOR LIGHTS

	**POWER SWITCH**	Energizes the ventilator section. When all three filters are sensed as being in their proper position, and sufficient airflow is proven, the cooking appliance contactor is energized.
	INDICATOR LIGHT (GREEN) **VENTILATOR POWER ON**	When lit, indicates that electrical power is available, and that the power switch (V.01) is turned *ON.*
	INDICATOR LIGHT (AMBER) **CHECK FILTERS (POSITION)**	When lit, indicates that the BAFFLE, PRE-FILTER and/or FILTER PACK is not in its proper position, or that an interlock switch is out of adjustment. Controlled by: Plunger switches position monitors for Filter Pack and Grease Baffle; and, vacuum switch S3 for Pre-Filter.
	INDICATOR LIGHT (AMBER) **REPLACE PREFILTER**	When lit, indicates that the pre-filter is approaching the end of its service life. **ALWAYS HAVE A SPARE PRE-FILTER ON HAND FOR QUICK REPLACEMENT.** Controlled by vacuum switch S1.
	INDICATOR LIGHT (AMBER) **REPLACE FILTER PACK**	When lit, indicates that the filter pack is approaching the end of its service life. **REPLACE FILTER PACK PROMPTLY!** Controlled by vacuum switch S2.
	INDICATOR LIGHT (RED) **SERVICE REQUIRED**	Indicates that either the pre-filter or the filter pack is individually clogged (the individual indicator light may be lit), or that the the airflow drop across both filters is critical. As a cost saving measure, **always change a dirty pre-filter first** (when lights V.04 & V.05 are *not lit*, and red light V.06 is *on*). **Note:** *Power to the cooking appliance will be de-energized whenever this RED "**SERVICE REQUIRED"** indicator light is lit.* When lit, the air flow is insufficient to meet appliance vapor capture levels requirements. Controlled by vacuum switch S4.

HOOD OPERATION - OPERATIONAL NOTES

WARNING:
FIRE AND HEALTH HAZARDS

DO NOT bypass or attempt to bypass the filter placement interlocks. Operating the appliance without filters properly in place will compromise the fire protection and air filtration capabilities of this unit. Serious personal injury and/or substantial property damage may result.

NOTICE:
Operating without all filters properly in place, and/or operating with filter placement interlocks defeated will void the manufacturer's warranty.

IMPORTANT:
NEVER wash the PREFILTER or FILTER PACK.This will shut down the cooking appliance. (Red "*SERVICE REQUIRED*" light will turn *ON*).

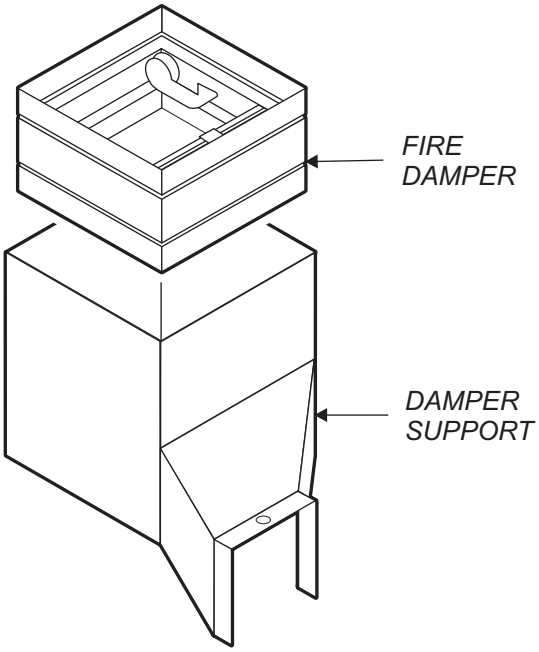
REPLACE PREFILTER and *REPLACE FILTER PACK* indicator lights provide a timely warning that a system shut-down is imminent. The actual time between the indicator light coming on and the loss of cooking appliance power will depend upon the cooking conditions.

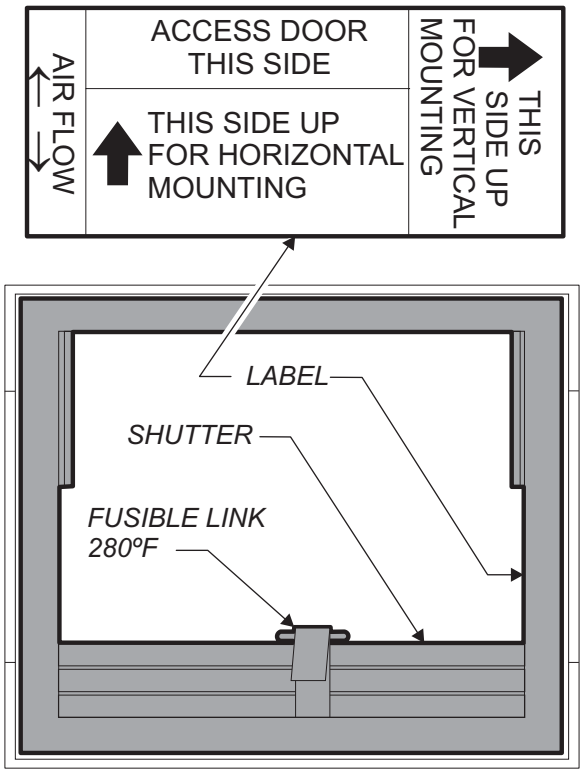
Anytime a dirty PRE-FILTER is replaced, the system airflow will increase. If the condition of the FILTER PACK is marginal, the *REPLACE FILTER PACK* light could then come on. If this happens, a fresh FILTER PACK must be installed within a reasonably short time. Loss of airflow through the old filter pack will soon cause a system shut-down when the airflow falls below minimum vapor capture levels.

KEEP SPARE FILTER PACKS ON HAND.

IMPORTANT: If you decide to "get the most" out of the old filter pack, and continue to use it until a system shut-down happens, it is advisable to have a fresh filter pack readily at hand, and have someone available who is capable of replacing it. Otherwise, you may experience an extended down time, with consequent associated loss of business.

The manufacturer assumes no liability for loss of business due to a system shutdown caused by a dirty pre-filter and/or filter pack (i.e. red *SERVICE REQUIRED* light is on), *when the user fails to have the proper replacement pre-filter and/or filter pack on hand*.





FIRE DAMPER INSTRUCTIONS

1. The FIRE DAMPER is accessible by removing the TOP PANEL The FIRE DAMPER sets in the DAMPER SUPPORT and may be removed by lifting straight up.

2. The FIRE DAMPER normally needs no maintenance. If it becomes heavily contaminated with dust and/or grease, it must be replaced.

3. If the FIRE DAMPER malfunctions or if the fusible link releases, the manufacturer recommends that the entire FIRE DAMPER ASSEMBLY be replaced.

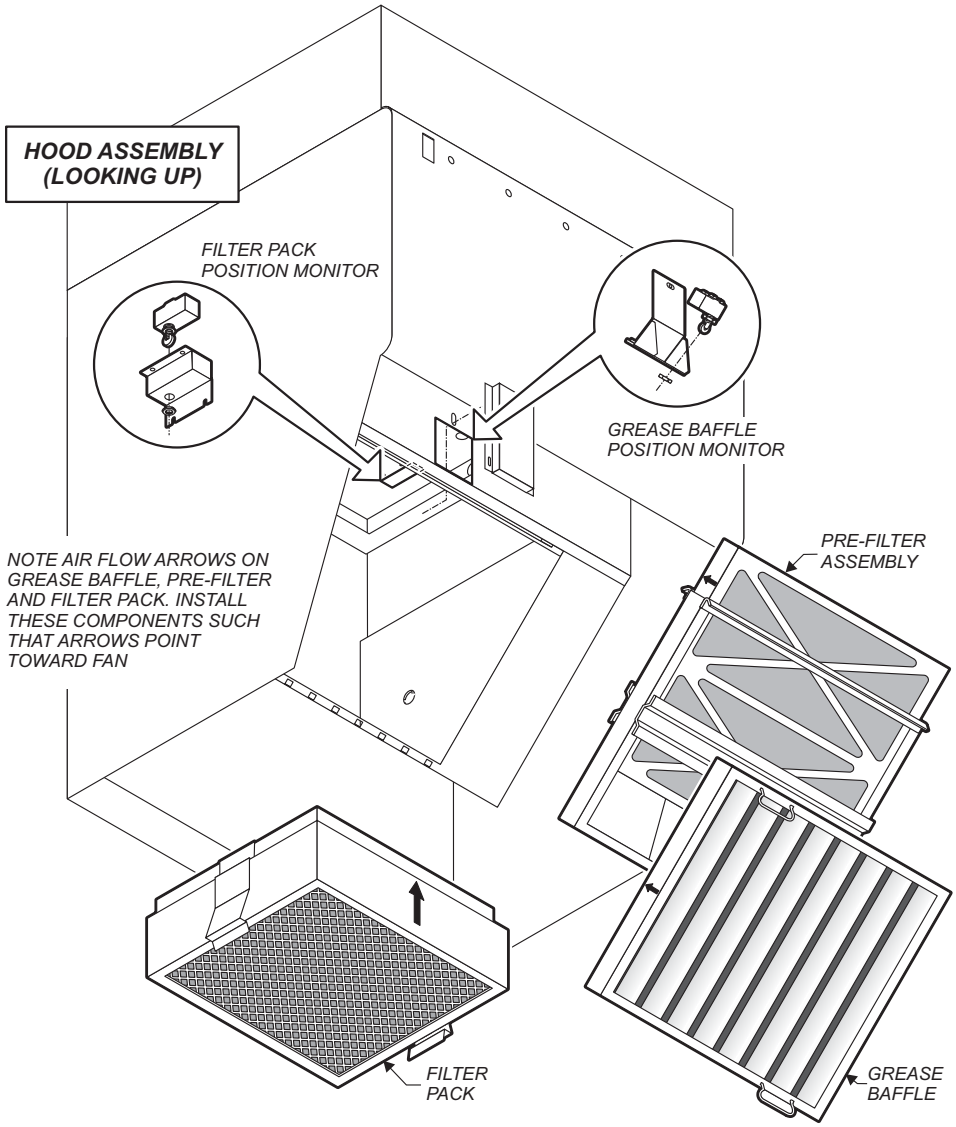
4. Reinstall the FIRE DAMPER with the “THIS SIDE UP FOR HORIZONTAL MOUNTING” arrow pointing away from the BLOWER.

IMPORTANT:
Replace the entire fire damper assembly if the link trips, or if the damper mechanism becomes heavily contaminated with dust and/or grease.

While the fusible link alone may be replaced, once the damper has tripped it may no longer function reliably.

Contact factory for pricing and availability.

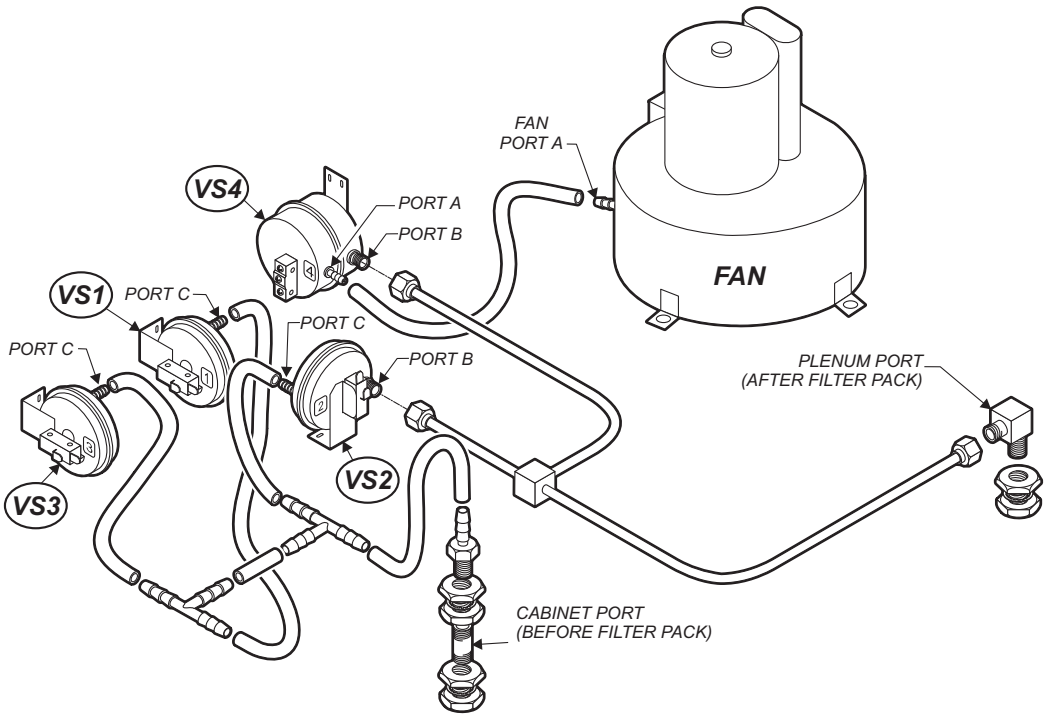
HOOD SECTION - FILTER SYSTEM


HOOD ASSEMBLY (LOOKING UP)
FILTER PACK POSITION MONITOR
GREASE BAFFLE POSITION MONITOR
NOTE AIR FLOW ARROWS ON GREASE BAFFLE, PRE-FILTER AND FILTER PACK. INSTALL THESE COMPONENTS SUCH THAT ARROWS POINT TOWARD FAN
PRE-FILTER ASSEMBLY
FILTER PACK
GREASE BAFFLE

NOTE:
Change the pre-filter as soon as the "*REPLACE PRE-FILTER*" indicator glows in order to extend the service life of the filter pack.

NOTE:
The charcoal portion of the filter pack is an aid in controlling cooking odors only. It will not completely eliminate such odors.

1. The GREASE BAFFLE separates grease particles and water vapor from the air stream by the centrifugal force of the air moving through its inter-leaved baffle plates. Ejecta is collected in the GREASE CUP through drain holes in the baffle frame and cabinet.
   The GREASE BAFFLE POSITION MONITOR plunger switch controls electric power to the ventilator fan.
2. The PRE-FILTER is composed of a replaceable media filter and a filter-retaining gage. The pre-filter captures the bulk of grease vapors. Pre-filter position is monitored by a vacuum switch, which is in the control circuit of the cooking appliance contactor.
3. The FILTER PACK is composed of a high-efficiency filter to capture grease vapors down to a very small particle size; and, an activated charcoal filter to help control cooking odors.
   The FILTER PACK POSITION MONITOR plunger switch is in the control circuit of the cooking appliance contactor.



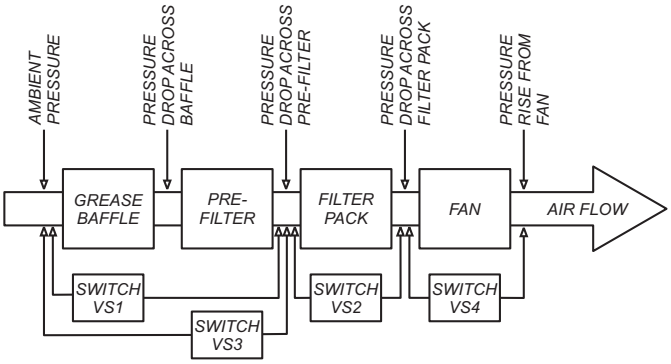
SWITCH FUNCTION

VS1 PRE-FILTER POSITION MONITOR
Unit will not function unless a pre-filter is properly installed, as sensed by the pressure drop across it. Pressure drop across the pre-filter must exceed setting before cooking appliance is energized. Insufficient pressure drop will illuminate "*CHECK FILTER*" indicator.

VS2 FILTER PACK ALERT
Will illuminate "*REPLACE FILTER PACK*" indicator if pressure drop across the filter pack exceeds setting.

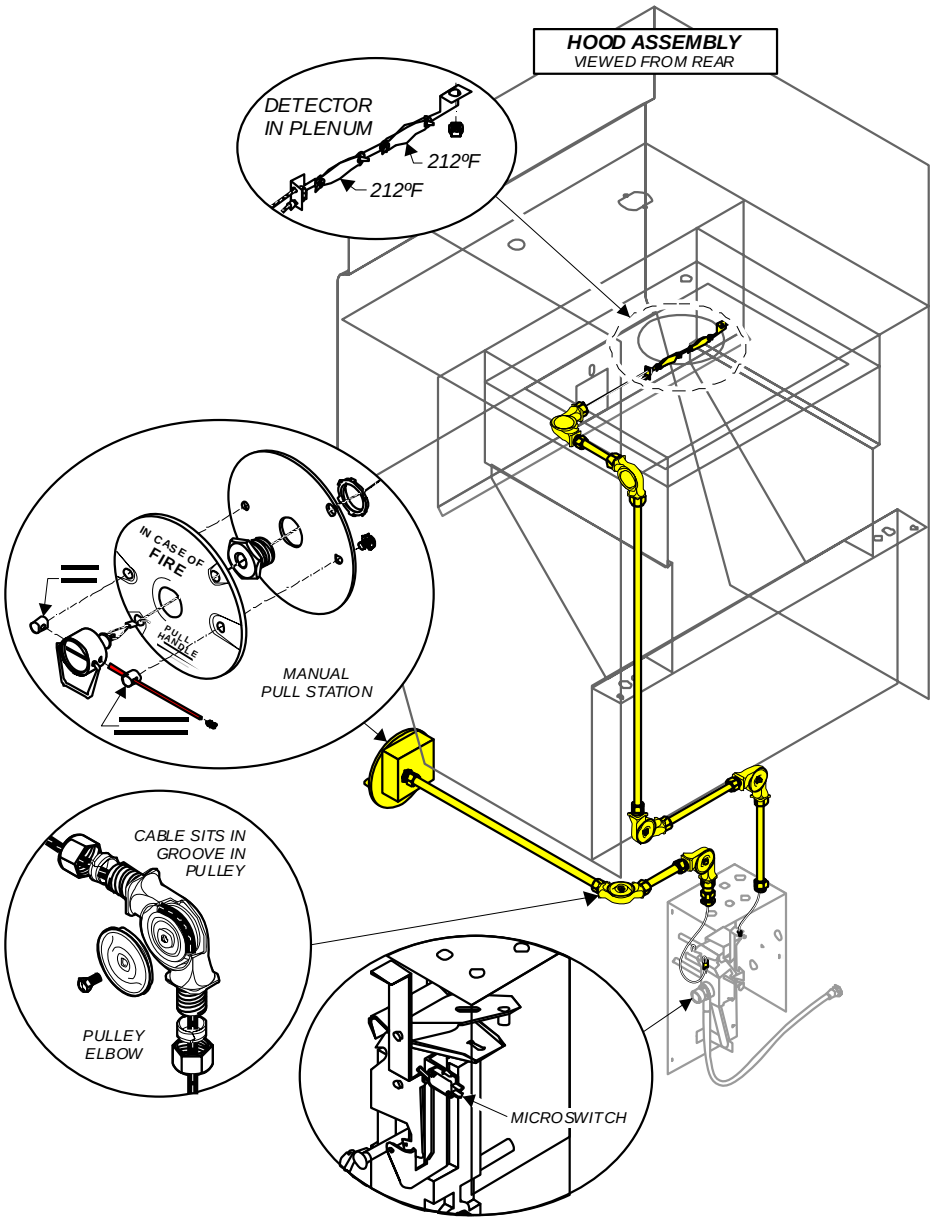
VS3 PRE-FILTER ALERT
Will illuminate "*REPLACE PRE-FILTER*" indicator if pressure drop across the pre-filter exceeds setting.

VS4 AIR FLOW MONITOR
Pressure drop must exceed setting before cooking appliance is energized. As filters become plugged, airflow decreases. Beyond the useful life of the filters, air flow will be insufficient to maintain the required pressure drop, which will shut-down ventilator fan and cooking appliance and illuminate "*SERVICE REQUIRED*" indicator.



IMPORTANT:
Vacuum switch settings are factory set, and are not adjustable.

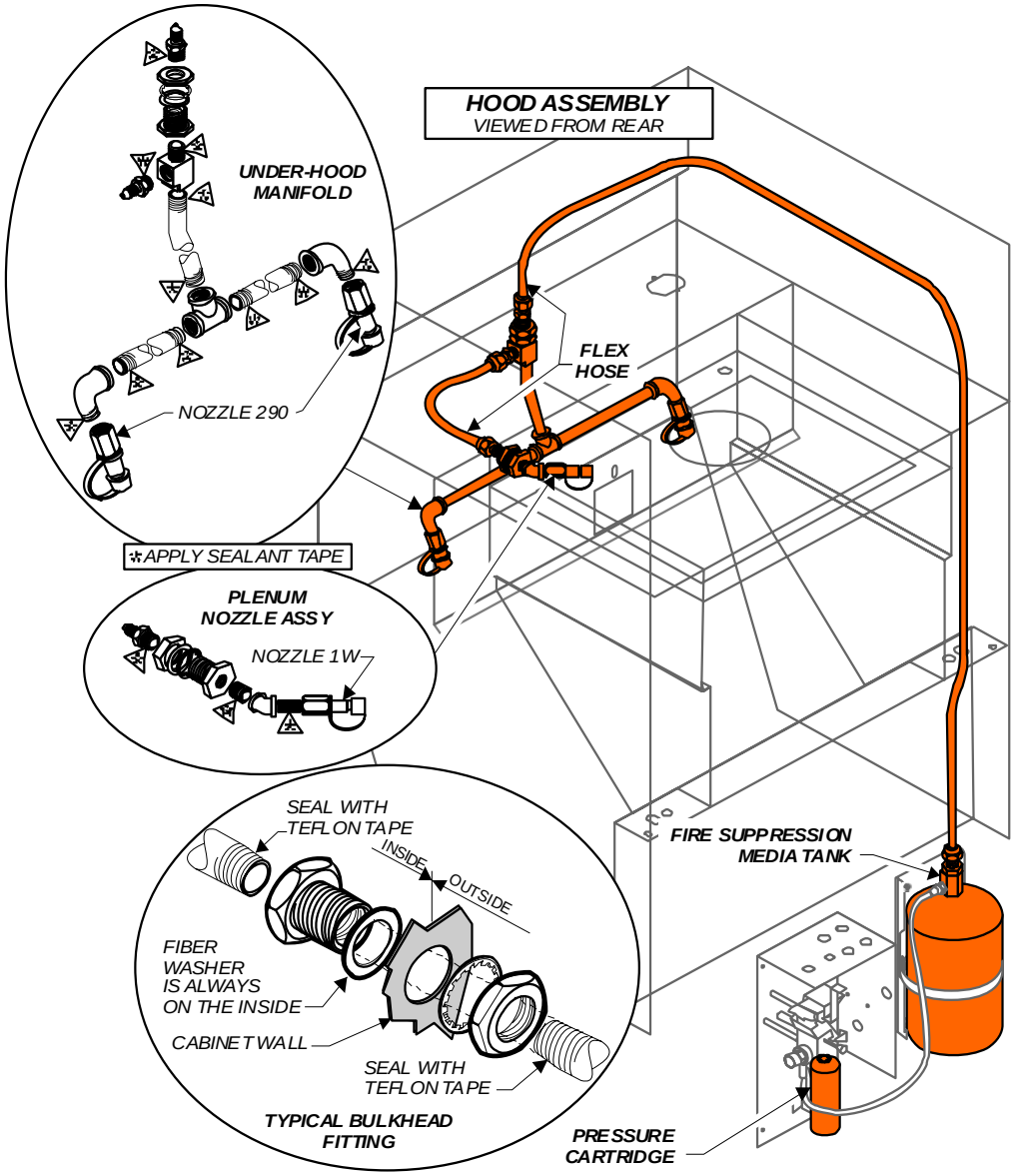
HOOD SECTION - ANSUL® FIRE DETECTION SYSTEM



IMPORTANT:
All servicing of the fire detection system to be performed by an authorized Ansul® agent only.

1. Cooking appliance protected by a series detector by two 212ºF fusible links at the inlet of the ventilator fan.
2. Fire suppression system may be activated by the manual pull station on the front of the unit, or by a remote manual pull station if installed.
3. A microswitch in the Ansul® Automan assembly allows connection to a building fire alarm system.

HOOD SECTION - ANSUL® FIRE SUPPRESSION SYSTEM



1. Actuation of the Ansul® system will cause the pressure cartridge seal to be punctured, which will pressurize the 1.5 gallon media tank. Fire suppression media will be forced through the piping where it will spray from the various nozzles.
2. The cooking appliance surface is protected by two type 290 nozzles.
3. The plenum area between the filters and the fan is protected by a single type 1W nozzle.
4. The pressure integrity of the plenum bulkheads is maintained by the use of compression fittings at the piping penetrations.
5. Nozzles are protected from grease contamination by press-on silicone rubber caps.

IMPORTANT:
All servicing of the fire suppression system to be performed by an authorized Ansul® agent only.

HOOD SECTION - TROUBLESHOOTING SUGGESTIONS

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
Entire unit inoperative No lights glow No buzzer sounds	Unit unplugged.	Plug power cord into receptacle
	Circuit breaker off or tripped	Reset circuit breaker
	Damaged power cord	Replace power cord
	Damaged power switch	Check switch. Replace as req'd.
	External interlock jumper loose or damaged (unit is not connected to building fire control system)	Check jumper. Repair or replace as required
	External interlock open (unit connected to building fire control system)	Locate and rectify open circuit condition in building fire control system.
Cooking appliance inoperative "POWER" light on hood *ON*. Vent fan working ok with no service	Contactor, wiring or connectors damaged	Replace contactor Repair wiring
Cooking appliance inoperative "POWER" light on hood *ON*. Vent fan working OK. "SERVICE REQUIRED" light *ON*	Vacuum line to switch VS4 restricted	Check for restriction in vacuum line to switch.
	Vacuum switch VS4 open or defective	Check vacuum switch VS4. Replace as req'd.
	Vacuum pickup port in plenum, or vacuum port on blower plugged	Clean vacuum ports **NOTE:** Vacuum port in plenum may appear as a place to attach a nozzle. Do not attach a nozzle here. It will block the vacuum signal (see pg 11).
	Fire damper tripped	Replace fire damper NOTE: While the fusible link alone may be replaced, once the damper has tripped it may no longer function reliably.
Vent fan working OK, but amber "CHECK FILTERS" light stays *ON*	Grease baffle and/or filter pack position switch(es) open	Missing or un-seated filter assy. Reseat filter or adjust interlock switch.
	Vacuum switch VS1 open or damaged	Be sure pre-filter is hooked in position. Check for damaged vacuum line, or one that is disconnected at the vacuum switch or pick-up port. Also check port for grease contamination.

HOOD SECTION - TROUBLESHOOTING SUGGESTIONS (continued)

SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
Vent fan working OK, but amber "REPLACE PREFILTER" light *ON*.	Prefilter is at end of service life	Replace prefilter
	Vacuum Switch VS3 damaged	Replace vacuum switch VS3
"REPLACE PREFILTER" light turns on some of the time.	Pre-filter frame not hooked in position at top	Hook metal pre-filterframe at top to prevent air blowing around filter
	Pre-filter position switch SW1 misadjusted or damaged.	Check switch SW1, adjust or replace
	Prefilter is nearing end of service life	Replace prefilter
"REPLACE FILTER PACK" light *ON*.	Filter pack nearing end of its service life	Replace filter pack
	Filter pack vacuum switch VS2 lines restricted or switch damaged.	Check switch VS2, repair vacuum lines or replace switch.
Vent fan not operating and buzzer is sounding.	Appliance newly installed and Ansul® system not yet charged.	Check status of Ansul® system at rear of unit, if fired, **call Ansul® Service Distributor** for set-up.
	Ansul® system has been set off by overtemp condition, or manual pull station has been activated.	Check status of Ansul® system at rear of unit, if fired, **call Ansul® Service Distributor** for replacement of fire suppression agent and propellant. If fuse link has been activated, it must be replaced prior to re-cocking the Ansul® system.
Vent fan not operating. Buzzer silent. Green "POWER" light *ON.* Amber "CHECK FILTER" light and red "SERVICE REQUIRED" light *ON*.	Grease baffle not installed	Install grease baffle.
	Grease baffle position switch SW2 misadjusted or damaged.	Check switch SW2, adjust or replace

CAUTION:
HOT SURFACE

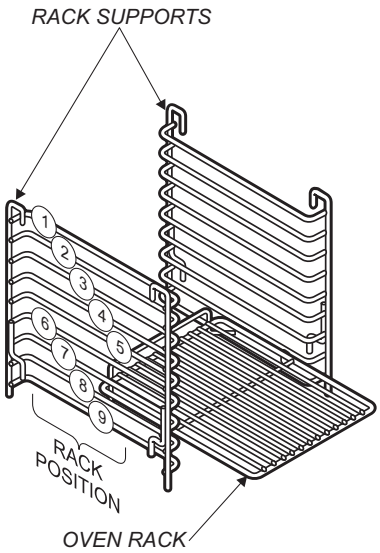
Exposed surfaces can be hot to the touch and may cause burns.

CAUTION:
SHOCK HAZARD

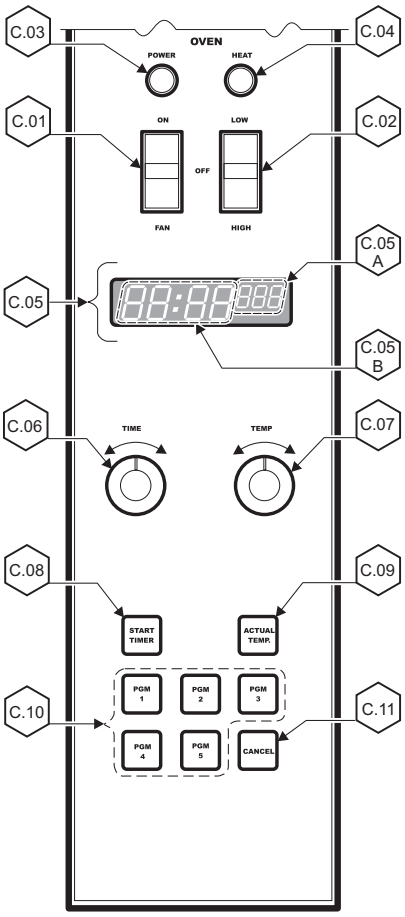
DO NOT splash or pour water onto control panel or wiring.

NOTE: Damage caused by moisture leaking into the electronic controller is NOT covered by warranty.

SUGGESTION:
For best baking results when making baking soda biscuits, use rack positions 2, 5 & 8 (where rack position 1 is the top rack).
When baking one pan:
use rack 5 (center rack)
When baking two pans:
use racks 2 & 8
When baking three pans:
use racks 2, 5 & 8



CONVECTION OVEN OPERATING INSTRUCTIONS



A. MANUAL COOK MODE

1. Press OVEN POWER SWITCH (C.01) to *ON*. OVEN POWER *ON* INDICATOR (C.03) will glow when the switch is *ON*.
2. Rotate OVEN TEMPERATURE CONTROL knob (C.07) until the desired cooking temperature is displayed on the READOUT (C.05A). The oven will begin heating, HEATING indicator (C.04) will glow and temperature digits will flash until the set temperature is reached.
3. Rotate OVEN TIME CONTROL knob (C.06) until the desired time is displayed on the READOUT. The digits and colon will flash, indicating that time has been set but the timer is not started.
4. Load product in the oven. Press START TIMER key (C.08). The timer digits count down and the colon (only) flashes during the timer period.
5. At the end of the timer period, an audible alarm will sound. Press CANCEL key (C.11) to silence the alarm.

B. PROGRAM COOK MODE

1. Five (5) programmable keys (C.10) are provided for presetting frequently used time / temperature combinations. To set the program:
   a. Press and hold the appropriate PGM key.
   b. While holding the PGM key, turn the TIME and TEMP knobs until the desired time and temperature is displayed on the readout.
   c. Release the PGM key to store the displayed time and temp in memory.
2. The program for any PGM key can be recalled by momentarily pressing that PGM key.
3. To start a programmed cook cycle, press the appropriate PGM key and the START TIME key. Once the cook cycle has started, the TIME and TEMP knobs are locked out to prevent accidental re-programming.
4. The actual oven temperature may be recalled at any time by pressing the ACTUAL TEMP key (C.09).
5. At the end of the timer period, an audible alarm will sound. Press CANCEL key (C.11) to silence the alarm.

C. TEMPERATURE OFFSET MODE

1. A user preference offset mode is provided should the user feel the oven cooks too hot or too cold.
2. The OFFSET MODE can be used to offset the set / displayed temperature from the sensed temperature by as much as ± 35ºF, in 5ºF increments:
   a. Rotate the TIME controller until the time digits on the display read "00:00".
   b. Rotate the TEMP control until the temp digits display between 400º and 500º.
   c. Press and hold the START TIMER key for five seconds.
   d. Turn either the TIME or TEMP control until the desired offset is displayed.
   e. Press the ACTUAL TEMP key to exit.

CONTROL

A. The POWER switch allows the selection of ON (unit will heat, fan will run); OFF (no heat or fan: and, FAN (fan will run, but heating disabled).

B. The FAN switch allows the selection of either high or low fan speed.

C. Temperature is controlled according to the programmed setpoint and the temperature sensed in the oven cavity by a thermocouple temperature probe.

D. Oven heating elements are energized by a relay controlled by the temperature controller. Over-temperature protection is provided by a hi-limit thermostat in the relay control circuit.

DANGER
ELECTRIC SHOCK HAZARD
DO NOT SPRAY WATER ON OR AROUND ELECTRICAL EQUIPMENT
DO NOT WASH FLOOR NEAR ELECTRICAL EQUIPMENT WITH WATER SPRAY

WARNING: SHOCK HAZARD

All servicing requiring access to non-insulated electrical components must be performed by a factory authorized technician.

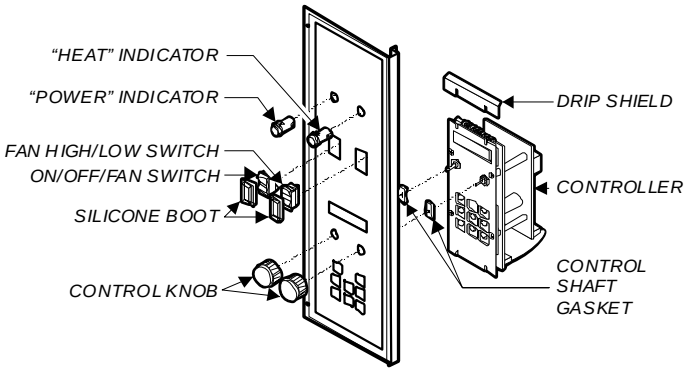
CAUTION: HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.

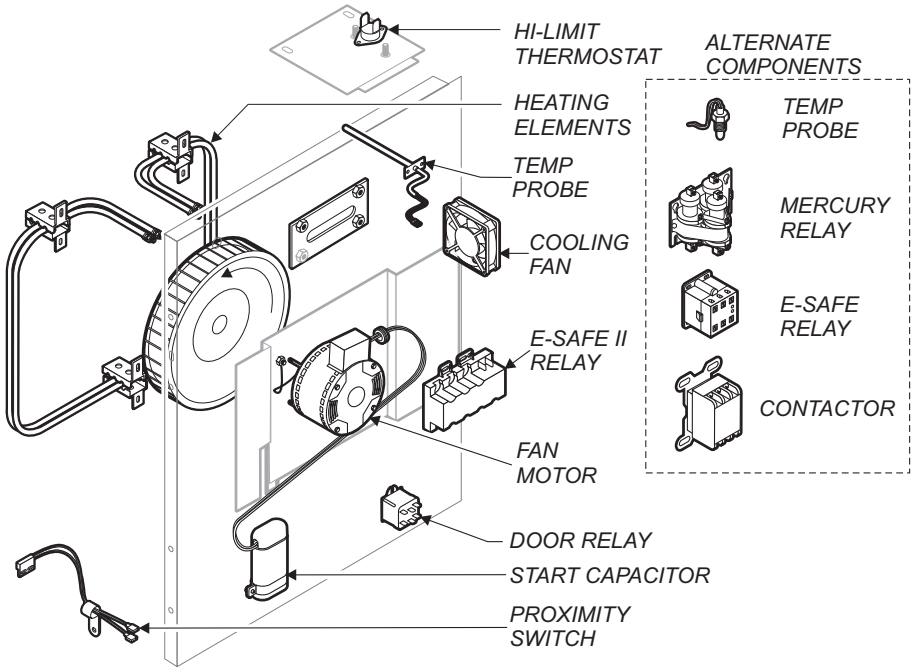
CAUTION: SHOCK HAZARD

Disconnect power before servicing the oven.

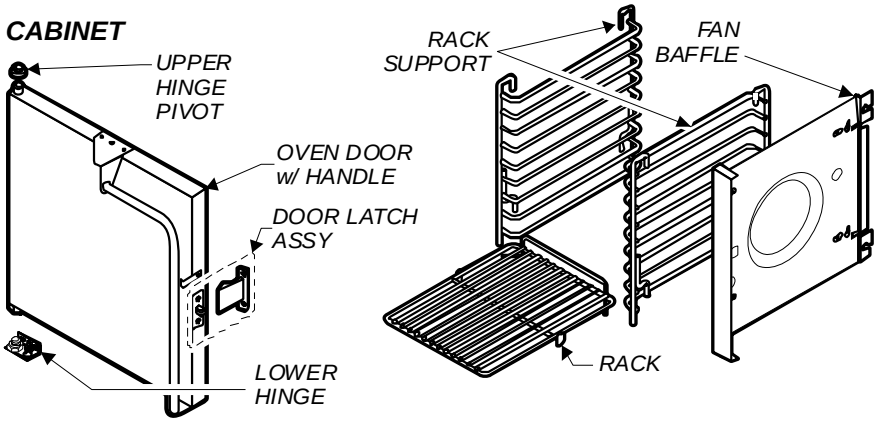
CONTROLLER

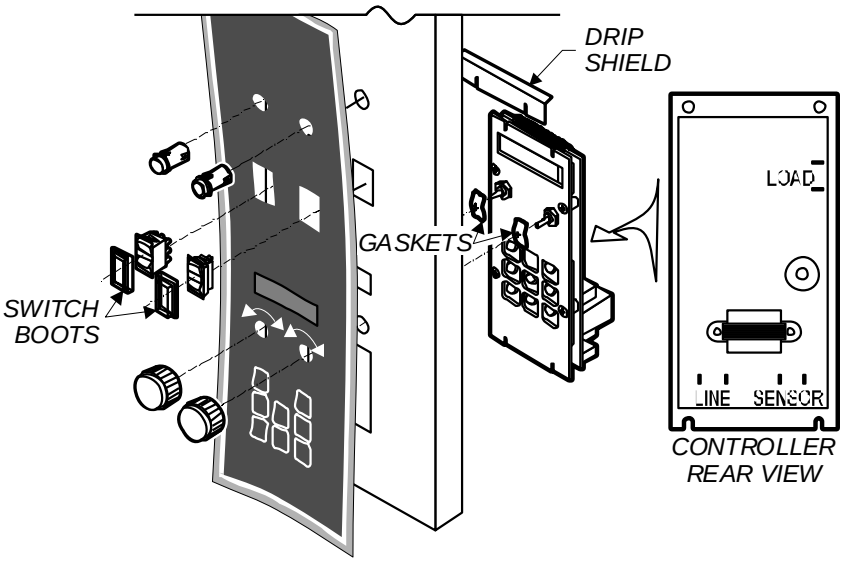


OVEN ELECTRICAL



CABINET





CAUTION:
HOT SURFACE

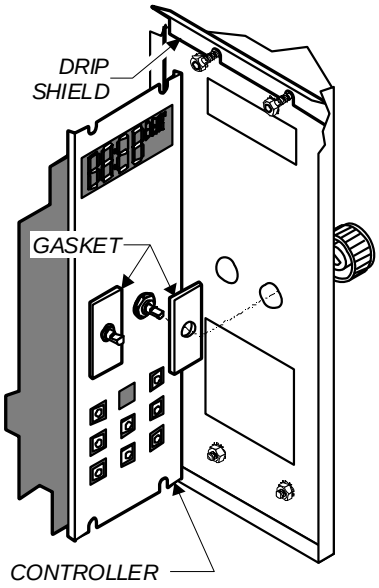
Exposed surfaces can be hot to the touch and may cause burns.

CAUTION:
SHOCK HAZARD

Disconnect power before servicing the controller.

NOTE: When installing new controller, check drip shield. If it is not securely glued to the cabinet panel, apply a thin bead of food-grade silicone to the notched side, then set it over the two studs that secure the top of the controller. When properly installed, the drip shield should be trapped between the cabinet panel and the controller.

NOTE: Shaft seals should be installed so that the adhesive faces are toward the controller, and their long sides are parallel to the long side of the controller.



REPLACE CONVECTION OVEN CONTROLLER

1. Disconnect unit from electric power and allow to cool.
2. Remove time and temperature control knobs. Knobs pull straight off shafts.
3. Note and mark wiring connected to rear of controller. Remove wiring.
4. Remove two nuts from studs at top of controller. Loosen two nuts on studs at bottom. Lift controller out of cabinet.
5. Install shaft seals on time and temperature control shafts of replacement controller. Install and connect new controller. Press knobs on control shafts.
6. Reconnect to electric power and test for proper operation.

IMPORTANT:
If the drip shield is missing install moisture control kit p/n 67438.
If either switch boot is missing/damaged replace silicone boot p/n 63738.

REPLACE CONVECTION OVEN SWITCH (INDICATOR IS SIMILAR)

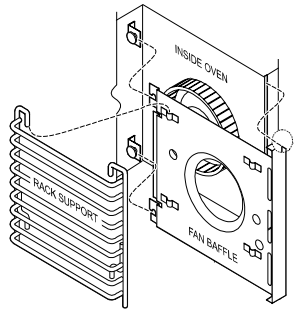
1. Disconnect unit from electric power and allow to cool.
2. Open the right side panel. Note and mark wiring connections on oven controller. Remove wiring.
3. Using a small flat blade screwdriver and working from the back (terminal) side of the switch, depress the mounting ears. At the same time, press the switch toward the front of the control panel. Once mounting ears are free of the panel, pull the switch out.
4. For switches, install a new silicone boot p/n 63738 before installing the switch. Work the flange of new boot over the bezel of the switch, making sure it is installed evenly.
   Switches and indicators push into panel until they lock.
5. Reconnect wiring.
6. Reconnect unit to electric power and test for proper operation.

CAUTION:
HOT SURFACE

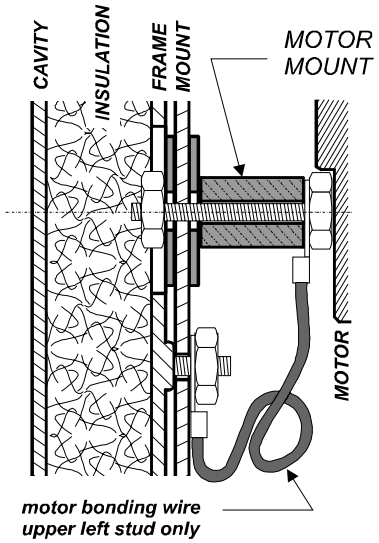
Exposed surfaces can be hot to the touch and may cause burns.

CAUTION:
SHOCK HAZARD

Multiple live electrical circuits are present inside the control section of the cabinet.
Disconnect power before removing the side panel.



BAFFLE & RACK SUPPORT



MOTOR MOUNT DETAIL

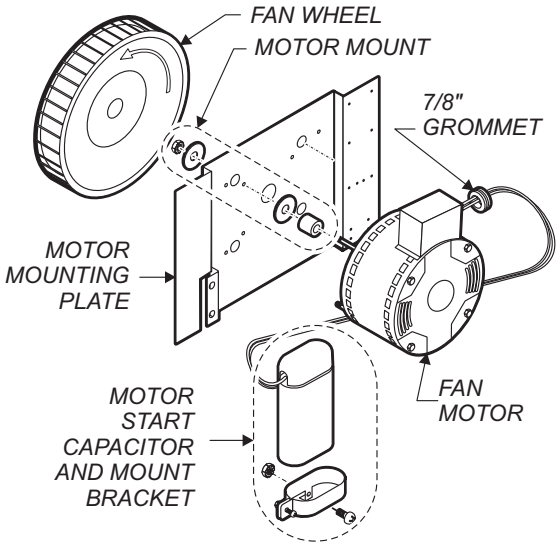
TEST BLOWER FAN MOTOR

A. IF motor does not run with power switch in ON or FAN position.
Attempt to start motor by spinning blower wheel clockwise.
IF motor starts, replace capacitor (p/n 69823).
IF motor does not start, check motor, switch and wiring.
IF fan is hard to turn, check motor mounting to be sure fan is not rubbing, otherwise replace motor (p/n 63932).
B. IF motor runs in power switch FAN position, but not in ON position.
Check power switch, proximity switch and wiring.
REMINDER: in ON position, door must be closed.
C. IF motor only runs with HIGH or LOW position of fan switch
Check fan switch and wiring, otherwise replace motor (p/n 63932).

A new style capacitor and mtg. bracket (p/n 504187) kit is available to upgrade old style units (where the capacitor is attached to the motor). The new configuration mounts the capacitor remotely on the oven frame.

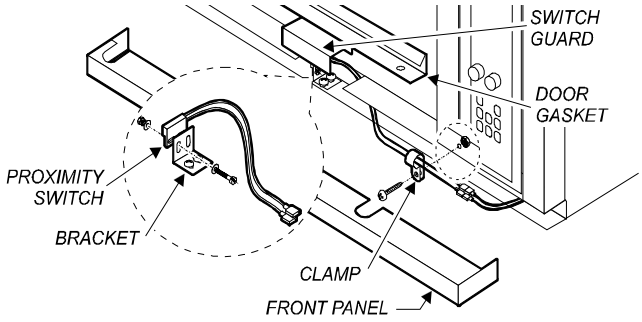
REPLACE BLOWER FAN MOTOR

1. Access blower fan by removing racks, rack support and fan baffle. Use care around blower wheel. FAN BLADES ARE SHARP!
2. Blower fan mounts to motor shaft with set screws. Remove blower fan.
3. Remove four nuts holding mounting bracket to cabinet. Remove four nuts holding motor to mounting plate.
NOTE: Use care that electrical components and wiring on motor mounting plate are not damaged.
4. Note wiring connections on motor, then disconnect wires. Remove 7/8” grommet from motor wiring box. Discard old motor.
5. Install motor on mounting bracket so that the motor wiring box is toward the top. Be sure to attach the bonding wire between motor and motor mount as shown at right.
6. Reinstall mounting bracket to cabinet.
7. Install 7/8” grommet in motor wiring box and connect wires.
8. Reinstall blower fan. Rotate fan several times to make sure fan or motor shaft does not rub on cabinet.
9. Reinstall fan baffle, rack mounts and racks.
10. Reconnect wiring. Reconnect unit to electric power and test for proper operation.



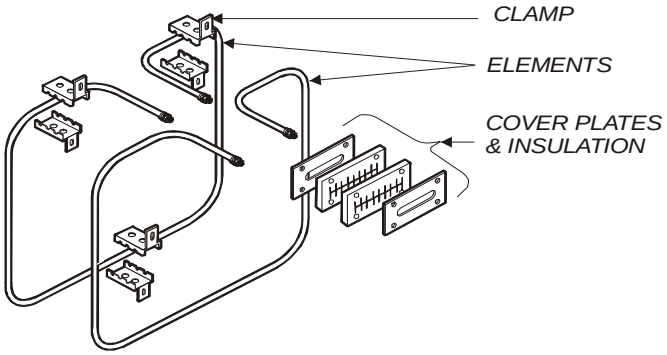
REPLACE PROXIMITY SWITCH

1. Remove lower door gasket, lower front panel and switch shield.
2. Disconnect wires and pull connectors through clamp.
3. Remove screws holding proximity switch to bracket.
4. Install new switch on bracket. As an initial adjustment, position the switch as high and as far forward as it will go.
5. Thread leads through clamp and connect to existing terminals.
6. Reassemble switch shield, door gasket and front panel.
7. Test operation:
   With power switch ON, fan should run when door is closed and latched, and shut off when door is unlatched.



REPLACE ELEMENT

1. Remove right side panel, racks, rack supports and fan baffle.
2. Note position of wires on elements. Disconnect wires to element(s) being replaced.
3. Loosen nuts holding element clamps to cabinet. Disassemble element clamps.
4. Work elements out of clamps until element being replaced can be removed.
5. Insert new element terminals through insulation and cover plates.
6. Reassemble elements in element clamps, making sure elements are evenly spaced. Be sure to use anti-seize on screws.
7. Reinstall element assembly on cabinet. Be sure to use anti-seize on weldstuds.
8. Reconnect wiring to element terminals.
9. Reinstall fan baffle, rack support, racks and right side panel.

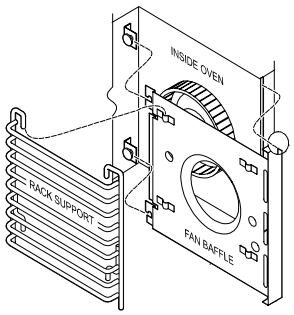


CAUTION:
HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.

CAUTION:
SHOCK HAZARD

Multiple live electrical circuits are present inside the control section of the cabinet.
Disconnect power before removing the side panel.



BAFFLE & RACK SUPPORT

CAUTION:
HOT SURFACE

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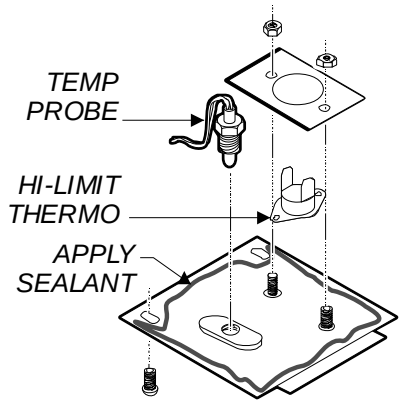
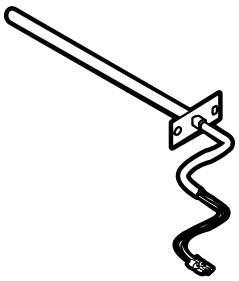
CAUTION:
SHOCK HAZARD

Multiple live electrical circuits are present inside the control section of the cabinet.
Disconnect power before removing the side panel.



HI-LIMIT THERMOSTAT
TEMP PROBE (OLD-STYLE)



TEMP PROBE (NEW-STYLE)

REPLACE TEMPERATURE PROBE

- OLD-STYLE

1. Remove racks, rack support and fan baffle. Remove oven right side panel.
2. Note positions of probe leads on controller, then disconnect leads.
   NOTE: Examine glass sleeving for damage, scorching and fraying. If unserviceable, replace sleeving while replacing the probe.
   Suggestion: Tie cord to the probe leads, and to the sleeving if it is being replaced, to ease chasing the wires through the cabinet.
3. Remove screws holding the probe panel to the cavity "ceiling". Carefully pry panel from cavity.
4. Remove temperature probe from panel. Remove probe leads, and sleeving if necessary, through the cavity
5. Feed new probe leads (and sleeving) back through the cabinet. Add a thin coating of anti-sieze to the probe threads and attach to the probe panel.
6. Apply a thin bead of hi-temperatire silicone sealant to the edge of the probe panel before reinstalling it in the cavity.
7. Connect probe leads to controller. Reconnect unit to electric power and test for proper operation.

- NEW-STYLE

1. Remove oven right side panel.
2. Note positions of probe leads on controller, then disconnect leads.
3. Remove nuts flange holding probe to cabinet. Pull probe straight out.
4. Reassemble in reverse order. Reconnect unit to electric power and test for proper operation.

REPLACE HI-LIMIT THERMOSTAT

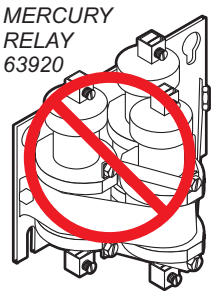
1. Remove racks, rack support and fan baffle. Remove oven right side panel.
2. Remove screws holding the probe panel to the cavity "ceiling". Carefully pry panel from cavity.
3. Disconnect wiring from hi-limit thermostat. Remove nuts holding hi-limit bracket to panel.
4. Install new hi-limit. Reinstall bracket and connect wiring.
5. Apply a thin bead of hi-temperatire silicone sealant to the edge of the probe panel before reinstalling it in the cavity.
7. Connect probe leads to controller. Reconnect unit to electric power and test for proper operation.

RELAY AND CONTACTOR REPLACEMENT

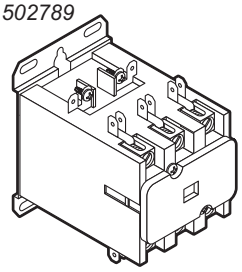
Per Federal environmental regulations, mercury-bearing devices may no longer be included in new-manufacture appliances. For Wells Bloomfield equipment, this applies mainly to mercury-wetted-contact relays. In addition, the E-Safe I electronic relay has been phased out in favor of the E-Safe II relay.
The type of oven controller, the type of griddle controller and the type of relay used will determine the replacement part requirement:

- For ovens with mercury relay 63920 or E-Safe I relay, order oven upgrade kit 65846A to upgrade to E-Safe II.
- For ovens with "old" oven controller 67438, use contactor 502789.
- For ovens with "new" oven controller 504713, use either contactor 502789 or E-Safe II relay 506967B.

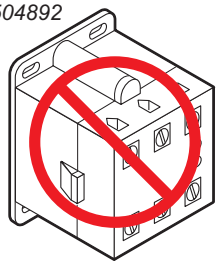
EQUIPMENT	RELAY REPLACEMENT
WVOC-4H with mercury relay 63920 or E-Safe I relay 504892	Upgrade Kit 65846A
WVOC-4H with (old) oven control 67438	Contactor 502789
WVOC-4H with (new) oven control 504713	E-Safe II relay 506967B or Contactor 507289



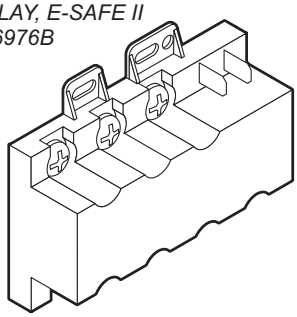
MERCURY RELAY 63920



CONTACTOR 502789



RELAY, E-SAFE I 504892



RELAY, E-SAFE II 506976B

CAUTION:
HOT SURFACE

Exposed surfaces can be hot to the touch and may cause burns.

CAUTION:
SHOCK HAZARD

Multiple live electrical circuits are present inside the control section of the cabinet.
Disconnect power before removing the side panel.

CAUTION:
BURN HAZARD

Allow appliance to cool completely before adjusting.

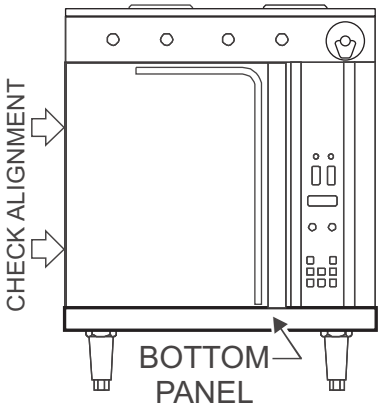
HINGE ADJUSTMENT

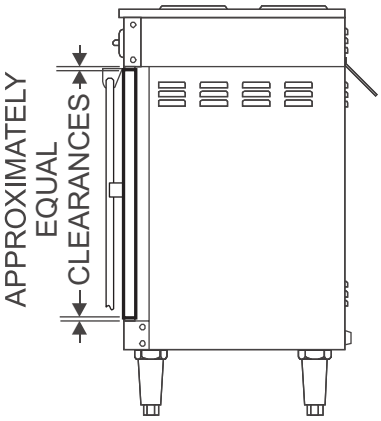
PRECAUTIONS: None

FREQUENCY: Monthly, at a Minimum; or, As Needed

TOOLS: Phillips (+) Screwdriver
7/16" Nut Driver
7/8" and 1-1/8" Wrenches

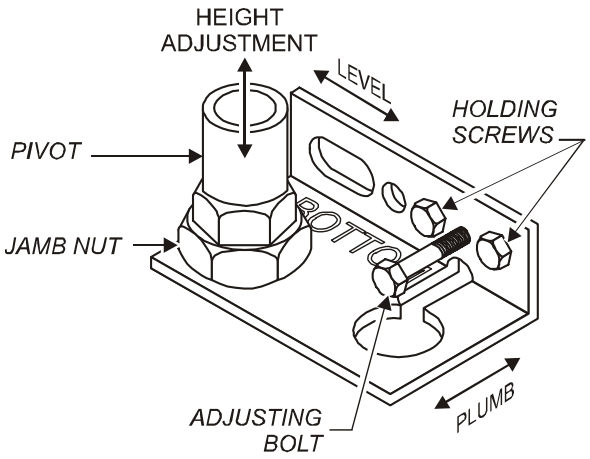
THE FOLLOWING PROCEDURE IS TO BE PERFORMED BY QUALIFIED PERSONNEL ONLY





Hinge Adjustment

1. Remove bottom panel to access pivot.



2. Gap between top of door and frame , and between bottom of door and frame must be approximately equal

   Adjust height of door by loosening jamb nut, then turning pivot on its screw mounting. Clockwise lowers the door height. Re-tighten jamb nut .

3. Gap between left side of door and frame must be the same from top to bottom

   Adjust door for plumb by loosening holding screws. Turn adjusting bolt to increase or decrease gap at bottom. Clockwise increases gap. Re-tighten holding screws.

4. Gap between top of door and frame must be the same from side to side

   Adjust door for level by loosening holding screws, then raising or lowering latch-end of door until it is level. Re-tighten holding screws.

5. Reinstall bottom panel.

Procedure is complete

CONVECTION OVEN SECTION - TROUBLESHOOTING SUGGESTIONS

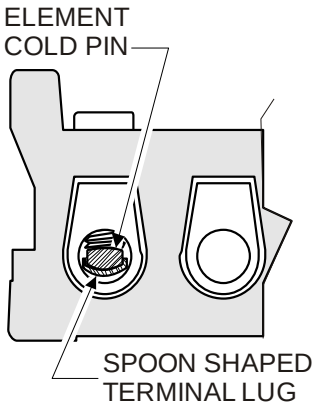
SYMPTOM	POSSIBLE CAUSE	SUGGESTED REMEDY
No power to appliance	Circuit breaker off or tripped	Reset circuit breaker
	Power cord unplugged or damaged	Check power cord Plug in or repair as required
	Hood section not "ON"	Verify that Hood Power Switch is "*ON*". If "*SERVICE REQUIRED*" indicator is lit, rectify filter problem.
	Fuse blown or fuse cap loose	Check power fuses. If blown, correct problem and replace fuses
Oven will not heat	Power switch in OFF or FAN position	Press power switch to ON
	Fan switch in OFF position	Press fan switch to HIGH or LOW
	Oven door not closed	Be sure door is closed and latched
	Temperature control not set	Set to desired temperature
	Hi-limit control tripped on excessive oven temperature	Allow oven to cool Hi-limit will reset
	Controller detects error	Refer to error codes below
	Damaged power switch or wiring	Replace switch. Repair wiring
	Damaged or disconnected temp probe	Check probe. Reconnect or repair
	Damaged oven relay	Replace relay
	Damaged air heating element(s)	Replace one or both elements
	Damaged oven controller	Replace controller
Fan does not run	Fan switch in OFF position	Press fan switch to HIGH or LOW
	Fan wheel loose on shaft	Tighten fan set screws
	Motor start capacitor or wiring damaged	Replace capacitor. Repair wiring
	Motor or wiring damaged	Replace motor. Repair wiring
Door pops open during cook cycle	Hinge out of adjustment	Adjust hinge
	Door strike loose	tighten strike screws
	Door latch damaged	Replace latch

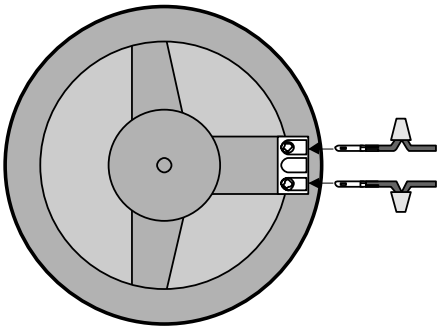
ERROR CODES

F1 Relay closed or relay ohms low when not cooking
F2 Actual temperature greater than T-SET MAX +60ºF (±35ºF)
F3 Open temperature sensor
F4 Shorted temperature sensor
F5 Relay open or relay ohms high when cooking
F6 No 60 Hz (Cycles per second other than 60 Hz detected)

CAUTION:
BURN HAZARD

Hotplate burner surfaces are very hot during operation. Allow unit to cool before performing any service.





New wires with lugs spliced to existing wire set and inserted into new insulator. Tighten set screws securely.

IMPORTANT: Do not cut fused wire on element to replace terminal block, this voids U.L.

REPLACE INFINITE SWITCH

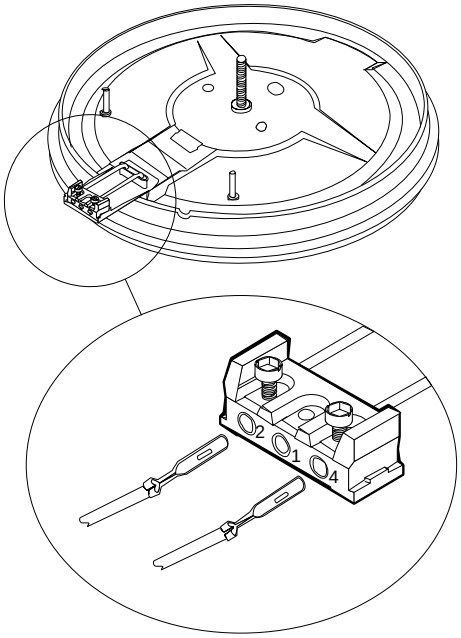
1. Disconnect unit from electric power and allow to cool.
2. Remove front panel. Note and mark wiring connections on the infinite switch. Remove wiring.
3. Remove knob from control shaft. Knob pulls sraight off.
4. Unscrew screws holding switch body to control panel. Withdraw switch.
5. Install new infinite switch. Be carreful of orientation. Switch body is marked with "UP" indicator arrow. Reconnect wiring.
6. Reconnect unit to electric power and test for proper operation.

REPLACE SOLID (FRENCH PLATE) ELEMENT

Applicable to Wells WV-4HF-series ventless appliances.

Wells has introduced an upgraded element terminal lug for solid (French plate) element cooktops. Units built prior to June 1, 2001 will require this upgrade when replacing elements.

1. When only the Ceramic Terminal Block is damaged and the Element wire is not fused: Replace with Kit 503972. This Kit replaces the Terminal Block with the new wire set. **NOTE:** Kit p/n 503972 does not include the element.
2. When there's damage to the element or the element wire is fused: Replace with complete element kit 503973 (240V).



ELEMENT, NEW TERMINAL LUG AND CERAMIC INSULATOR PN 503973 (240V).

SPIRAL HEATING EL:EMENT REPLACE MENT

Applicable to Wells WV-4HS-series ventless appliances.

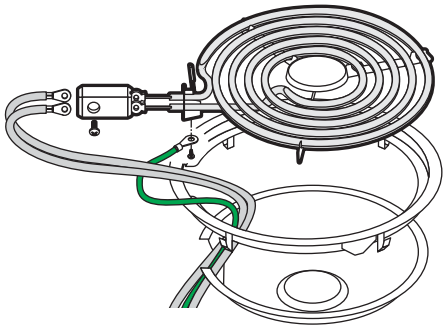
Wells part number 50293: Revised to the latest UL requirements, new replacement elements may connect differently than previously available replacement elements.

To install a new element in an existing appliance:

1. Disconnect appliance from electric power and allow to cool. Disconnect and remove old element.
2. Power leads require #8 high-temperature copper-tin ring terminal connectors. Ground lead requires #10 high-temperature copper-tin ring terminal connector. Replace or install the appropriate connector terminals as required.
3. Mount new element.
4. Route wiring through trim ring as shown. Connect power and ground leads.
   a. Be sure to reconnect ground wire to mounting clip of new element.
   b. Slide insulator onto new element before connecting leads.
   c. When properly installed, connector screws will hold insulator in place.
5. Reconnect appliance to electric power and test for proper operation.

CAUTION:
BURN HAZARD

Hotplate burner surfaces are very hot during operation. Allow unit to cool before performing any service.

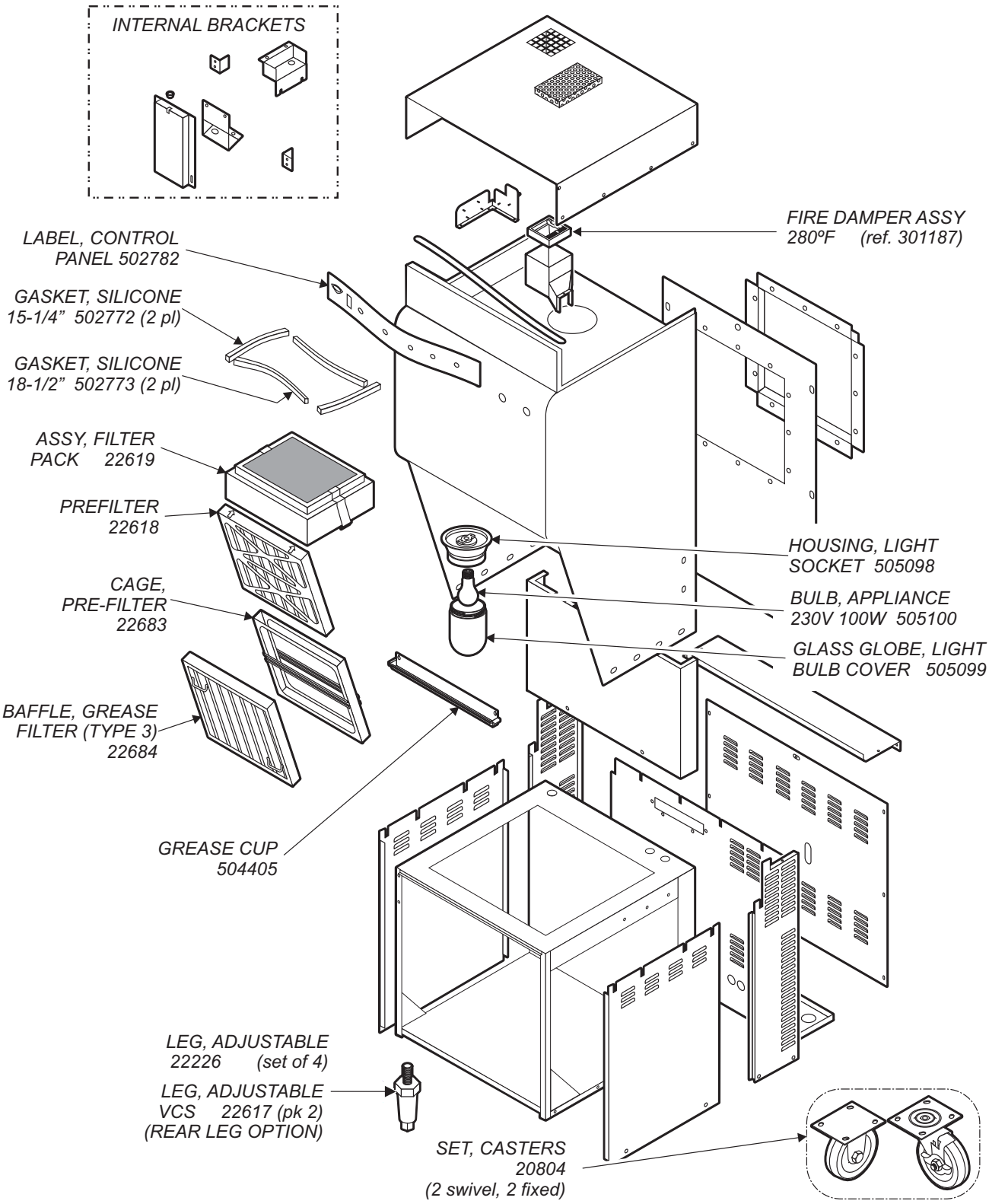


IMPORTANT:
This element is designed for use with high-temperature copper-tin terminals. Do not use stainless steel terminals.

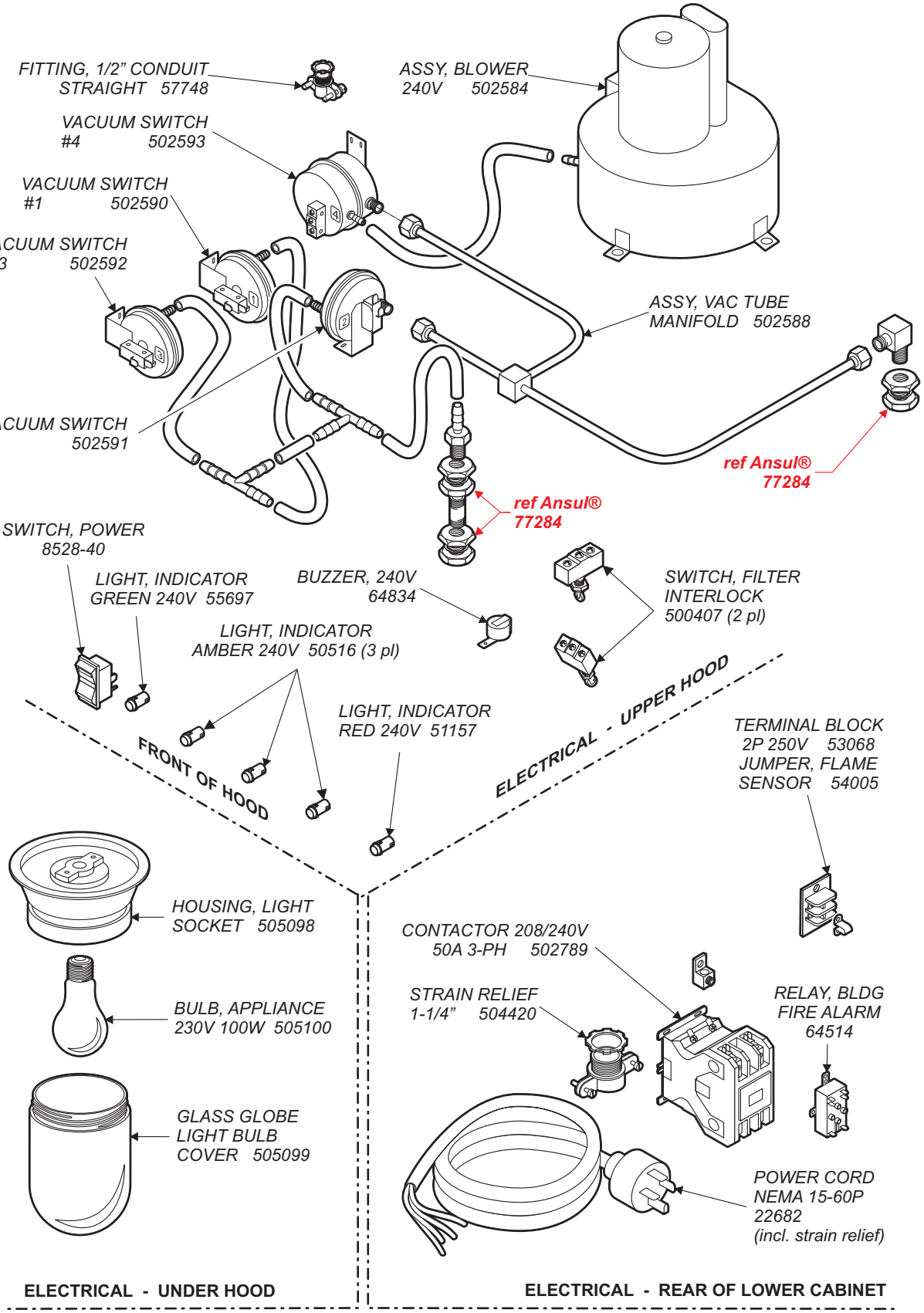
HOTPLATE TROUBLESHOOTING SUGGESTIONS

DESCRIPTION	POSSIBLE PROBLEM	SUGGESTED REMEDY
Hotplate will not heat	Hood section not "*ON*"	Verify that Hood Power Switch is "*ON*". If "*SERVICE REQUIRED*" indicator is lit, rectify filter problem.
One hotplate does not heat	Temperature control knobs not set to desired temperature	Set to desired temperature
	Damaged internal component	Check infinite switch, element, and wiring. Replace damaged components, repair wiring and loose connections as required.
	Cooling fan not operating	Check cooling fan and associated wiring for hotplate control section. Replace as required.

HOOD CABINET COMPONENTS



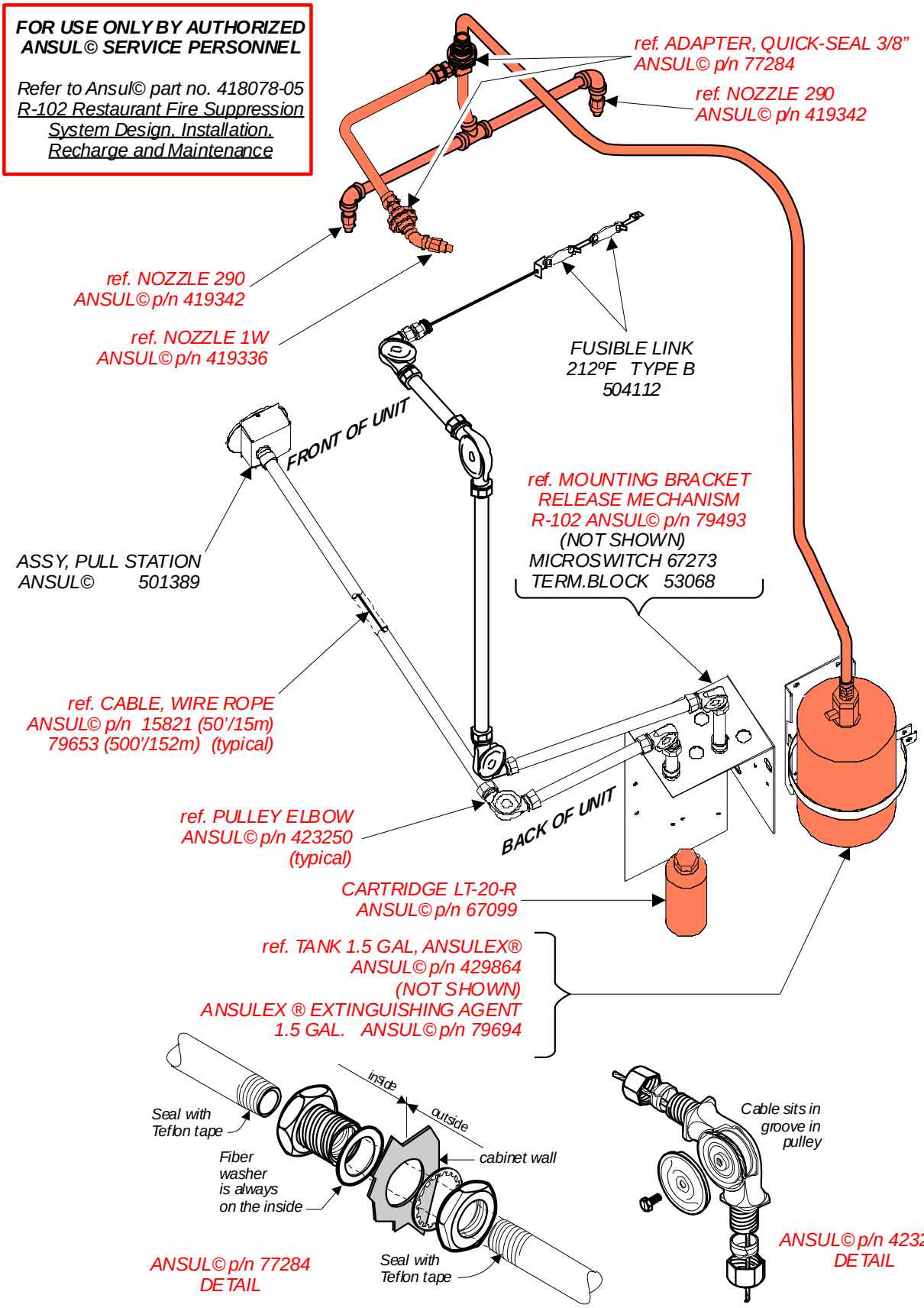
HOOD ELECTRICAL & VACUUM COMPONENTS


FITTING, 1/2" CONDUIT STRAIGHT 57748
ASSY, BLOWER 240V 502584
VACUUM SWITCH #4 502593
VACUUM SWITCH #1 502590
VACUUM SWITCH #3 502592
ASSY, VAC TUBE MANIFOLD 502588
VACUUM SWITCH #2 502591
ref Ansul® 77284
ref Ansul® 77284
SWITCH, POWER 8528-40
LIGHT, INDICATOR GREEN 240V 55697
BUZZER, 240V 64834
SWITCH, FILTER INTERLOCK 500407 (2 pl)
LIGHT, INDICATOR AMBER 240V 50516 (3 pl)
LIGHT, INDICATOR RED 240V 51157
FRONT OF HOOD
ELECTRICAL - UPPER HOOD
TERMINAL BLOCK 2P 250V 53068
JUMPER, FLAME SENSOR 54005
HOUSING, LIGHT SOCKET 505098
BULB, APPLIANCE 230V 100W 505100
GLASS GLOBE LIGHT BULB COVER 505099
CONTACTOR 208/240V 50A 3-PH 502789
STRAIN RELIEF 1-1/4" 504420
RELAY, BLDG FIRE ALARM 64514
POWER CORD NEMA 15-60P 22682 (incl. strain relief)
ELECTRICAL - UNDER HOOD
ELECTRICAL - REAR OF LOWER CABINET

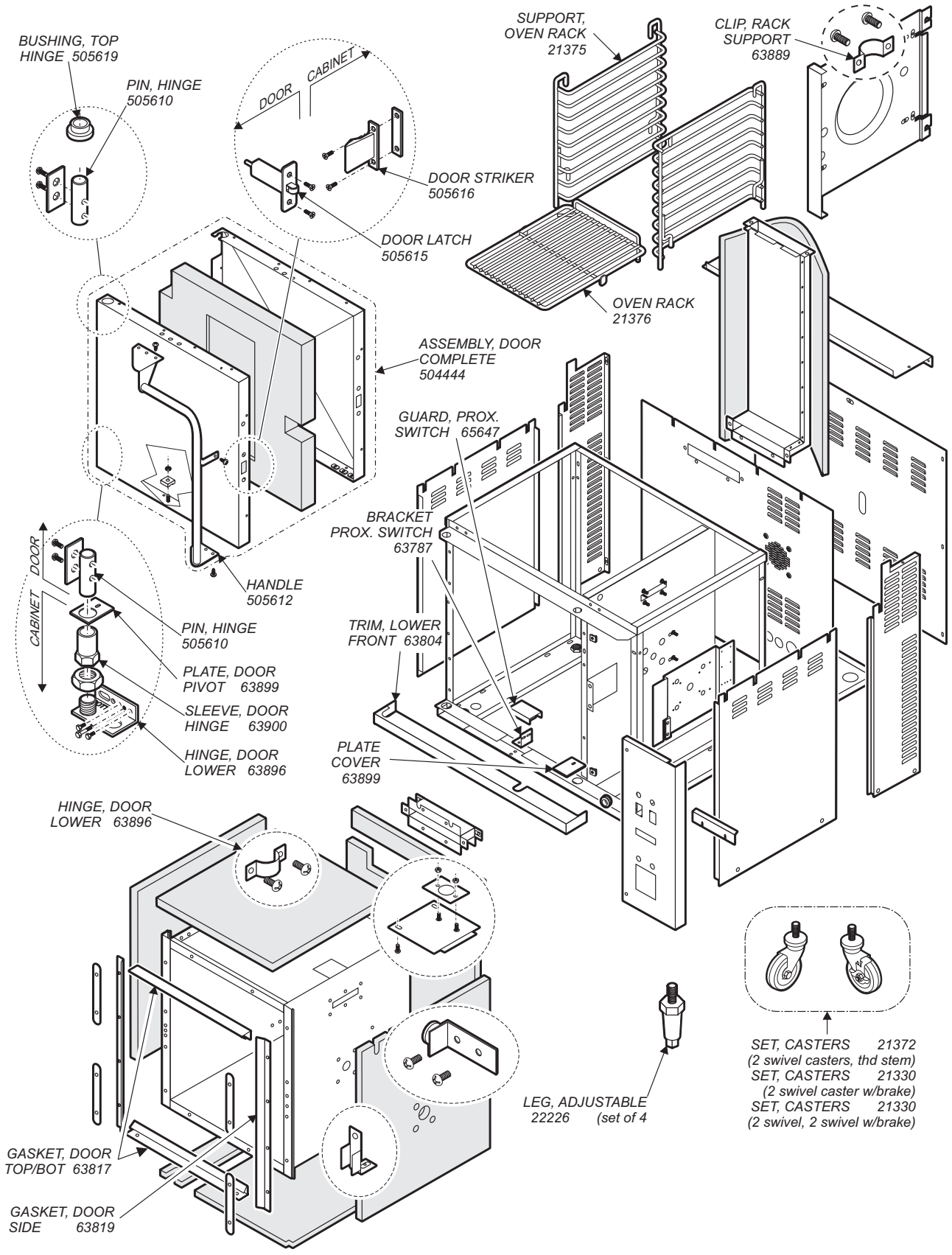
PARTS BREAKDOWN for ANSUL® COMPONENTS

FOR USE ONLY BY AUTHORIZED ANSUL© SERVICE PERSONNEL

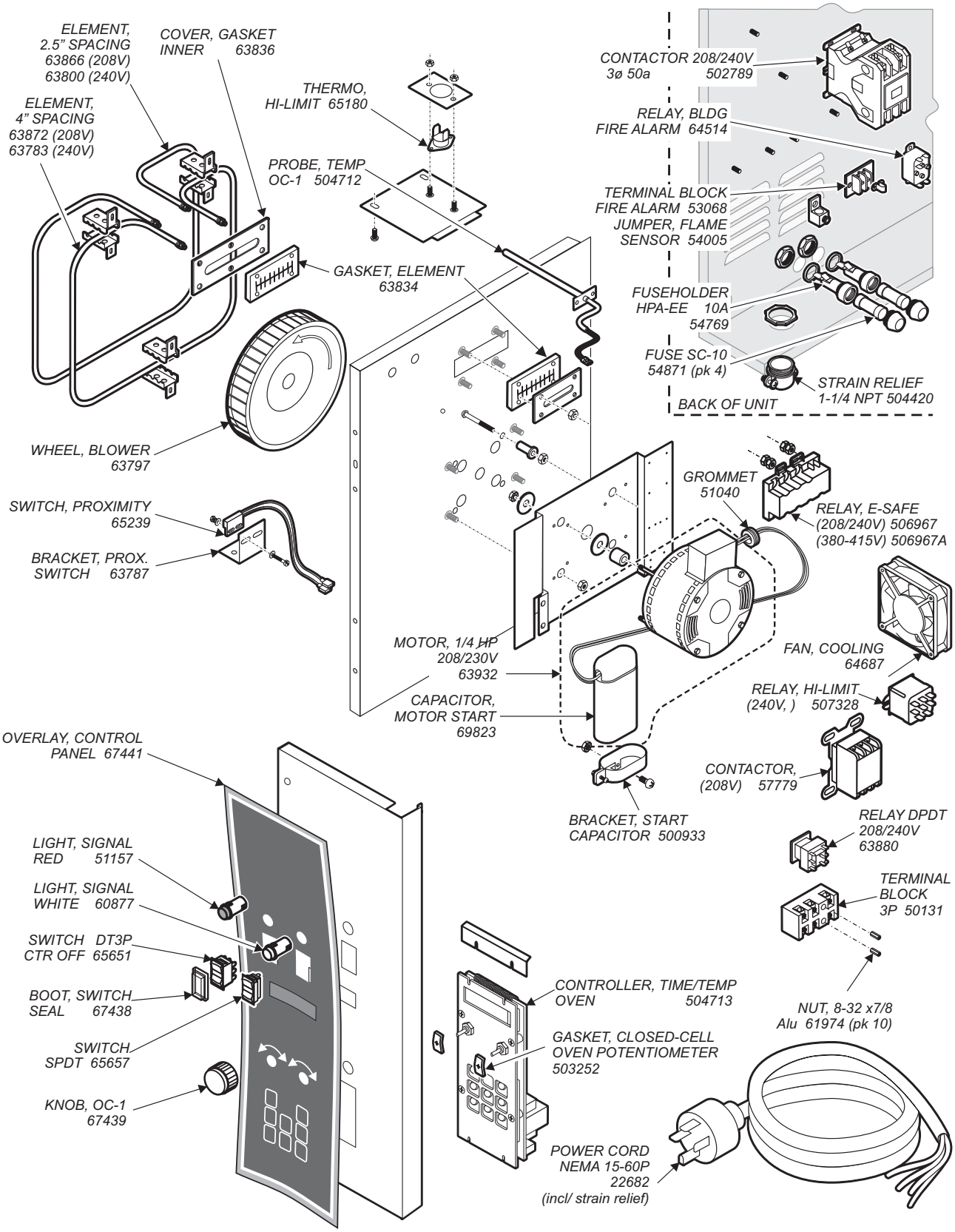
Refer to Ansul© part no. 418078-05 R-102 Restaurant Fire Suppression System Design, Installation, Recharge and Maintenance

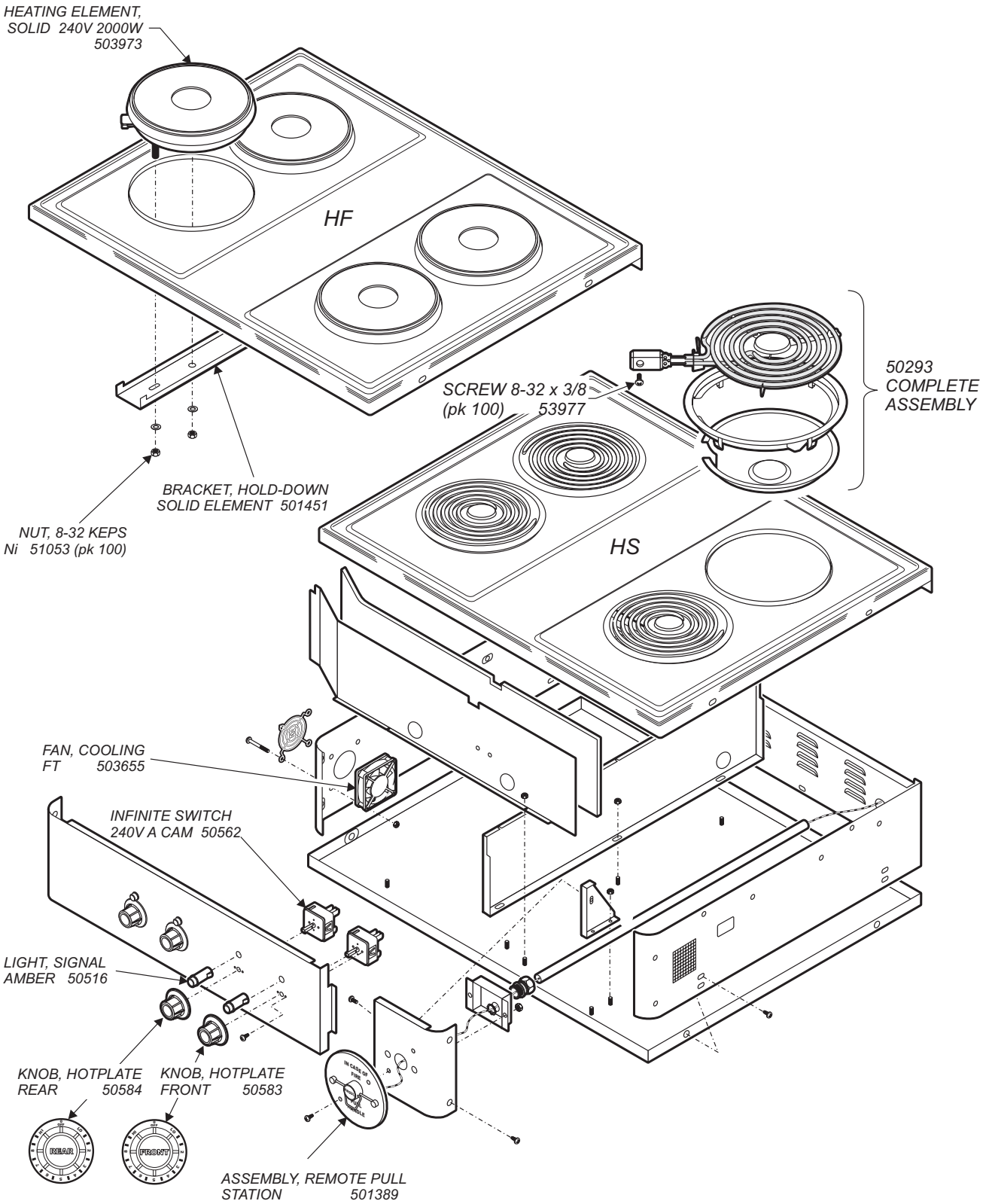


CONVECTION OVEN CABINET



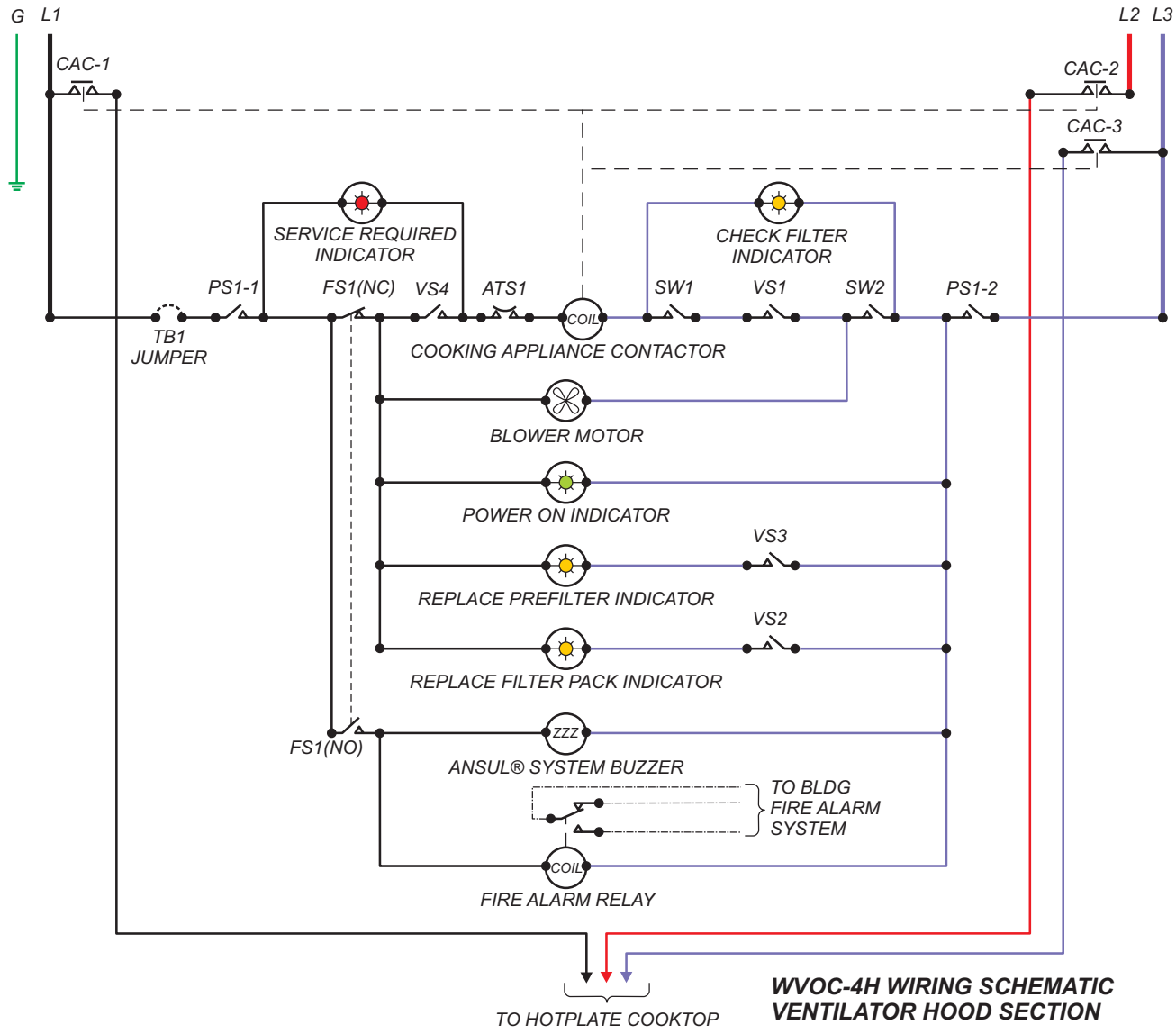
CONVECTION OVEN ELECTRICAL


ELEMENT, 2.5" SPACING 63866 (208V) 63800 (240V)
COVER, GASKET INNER 63836
ELEMENT, 4" SPACING 63872 (208V) 63783 (240V)
THERMO, HI-LIMIT 65180
PROBE, TEMP OC-1 504712
GASKET, ELEMENT 63834
WHEEL, BLOWER 63797
SWITCH, PROXIMITY 65239
BRACKET, PROX. SWITCH 63787
CONTACTOR 208/240V 3ø 50a 502789
RELAY, BLDG FIRE ALARM 64514
TERMINAL BLOCK FIRE ALARM 53068
JUMPER, FLAME SENSOR 54005
FUSEHOLDER HPA-EE 10A 54769
FUSE SC-10 54871 (pk 4)
STRAIN RELIEF 1-1/4 NPT 504420
BACK OF UNIT
GROMMET 51040
RELAY, E-SAFE (208/240V) 506967 (380-415V) 506967A
MOTOR, 1/4 HP 208/230V 63932
CAPACITOR, MOTOR START 69823
FAN, COOLING 64687
RELAY, HI-LIMIT (240V,) 507328
CONTACTOR, (208V) 57779
BRACKET, START CAPACITOR 500933
RELAY DPDT 208/240V 63880
TERMINAL BLOCK 3P 50131
NUT, 8-32 x7/8 Alu 61974 (pk 10)
OVERLAY, CONTROL PANEL 67441
LIGHT, SIGNAL RED 51157
LIGHT, SIGNAL WHITE 60877
SWITCH DT3P CTR OFF 65651
BOOT, SWITCH SEAL 67438
SWITCH SPDT 65657
KNOB, OC-1 67439
CONTROLLER, TIME/TEMP OVEN 504713
GASKET, CLOSED-CELL OVEN POTENTIOMETER 503252
POWER CORD NEMA 15-60P 22682 (incl/ strain relief)


HEATING ELEMENT, SOLID 240V 2000W 503973
HF
SCREW 8-32 x 3/8 (pk 100) 53977
50293 COMPLETE ASSEMBLY
BRACKET, HOLD-DOWN SOLID ELEMENT 501451
NUT, 8-32 KEPS Ni 51053 (pk 100)
HS
FAN, COOLING FT 503655
INFINITE SWITCH 240V A CAM 50562
LIGHT, SIGNAL AMBER 50516
KNOB, HOTPLATE REAR 50584
KNOB, HOTPLATE FRONT 50583
REAR
FRONT
ASSEMBLY, REMOTE PULL STATION 501389

WIRING SCHEMATIC

HOOD SECTION

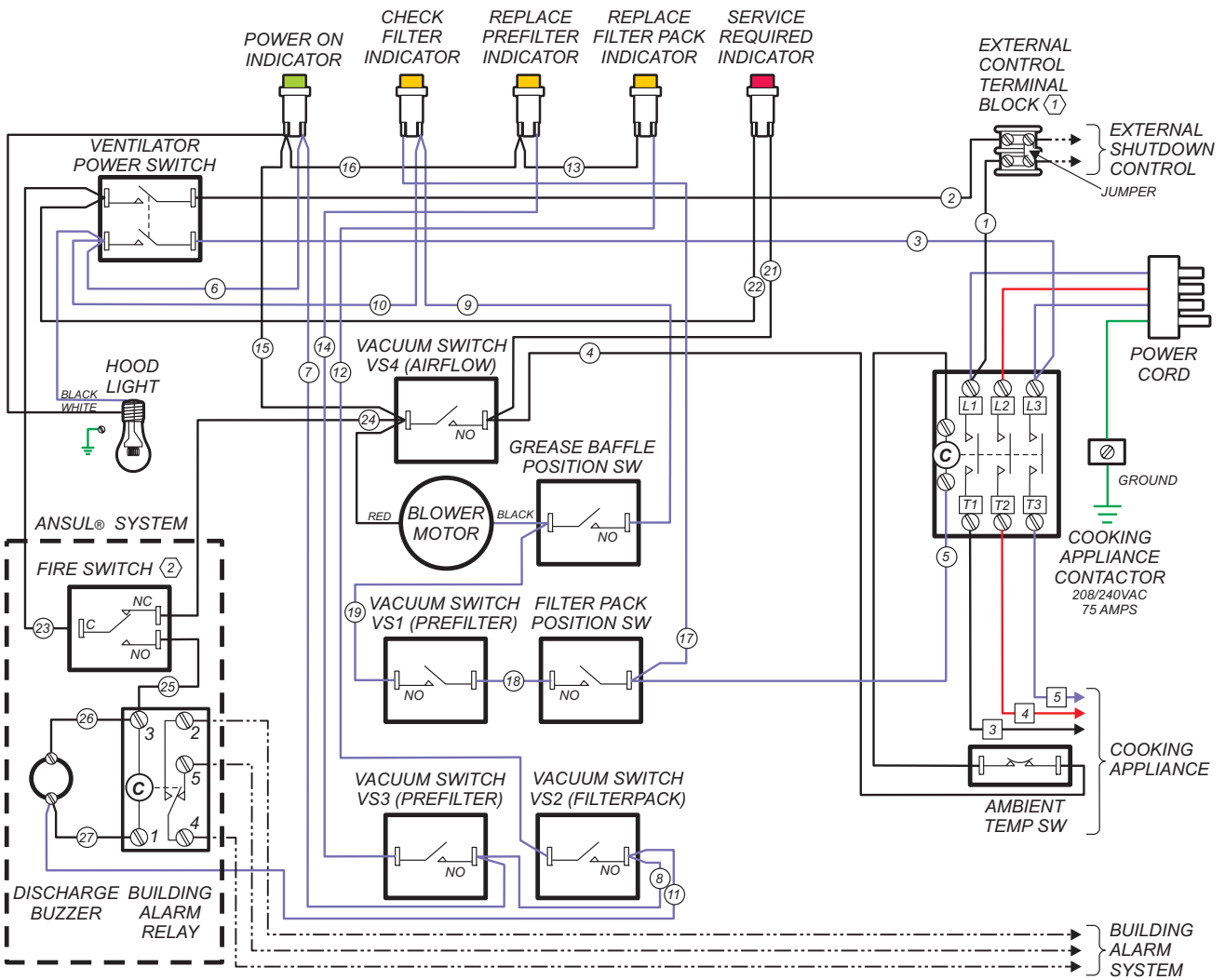


WVOC-4H WIRING SCHEMATIC VENTILATOR HOOD SECTION

LEGEND

ATS1 = AMBIENT TEMPERATURE SWITCH
CAC = COOKING APPLIANCE CONTACTOR
FS1 = ANSUL® FIRE ALARM SWITCH
PS1 = POWER SWITCH
SW1 = FILTER PACK POSITION SWITCH
SW2 = GREASE BAFFLE POSITION SWITCH
VS1 = PRE-FILTER POSITION VAC SWITCH
VS2 = REPLACE FILTER PACK VAC SWITCH
VS3 = REPLACE PRE-FILTER VAC SWITCH
VS4 = AIRFLOW MONITOR VAC SWITCH

HOOD SECTION



NOTES

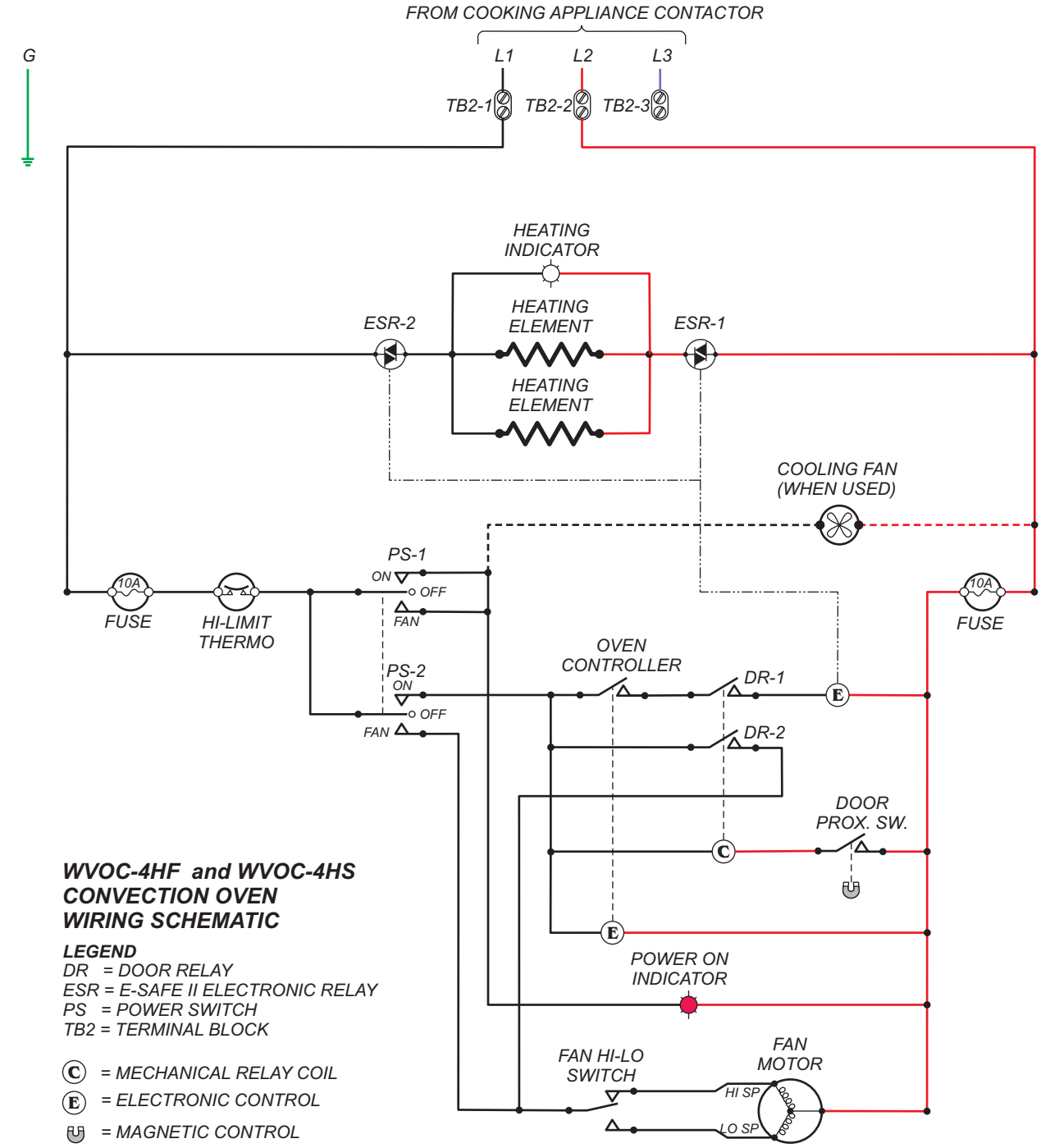
1. REMOVE JUMPER WHEN USING EXTERNAL CONTROL.
   IMPORTANT:
   DO NOT CONNECT ANY POWER TO EXTERNAL CONTROL TERMINAL BLOCK!
2. FIRE SWITCH SHOWN WITH ANSUL® SYSTEM CHARGED AND COCKED

MODEL	VOLTS 60Hz	3ø AMPS			1ø AMPS	WATTS
		L1	L2	L3		
WVOC-4HF	208V	32	31	26	55	11,500
	240V	36	35	30	59	14,100
WVOC-4HS	208V	39	38	34	64	13,300
	240V	41	40	39	69	16,500

from p/n 304982 issue C

WIRING SCHEMATIC

OVEN SECTION



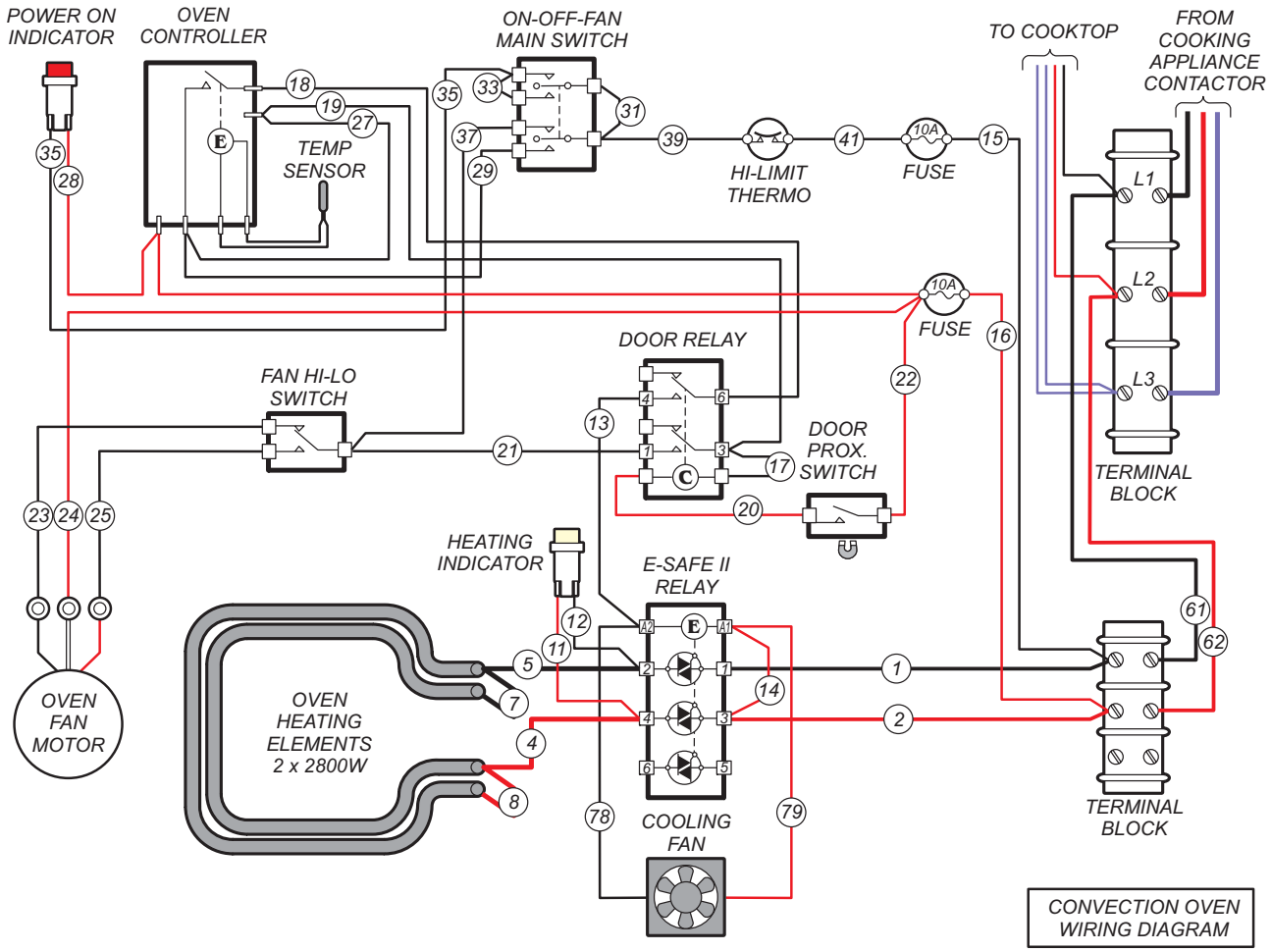
WVOC-4HF and WVOC-4HS CONVECTION OVEN WIRING SCHEMATIC

LEGEND

DR = DOOR RELAY
ESR = E-SAFE II ELECTRONIC RELAY
PS = POWER SWITCH
TB2 = TERMINAL BLOCK

Ⓒ = MECHANICAL RELAY COIL
Ⓔ = ELECTRONIC CONTROL
U = MAGNETIC CONTROL

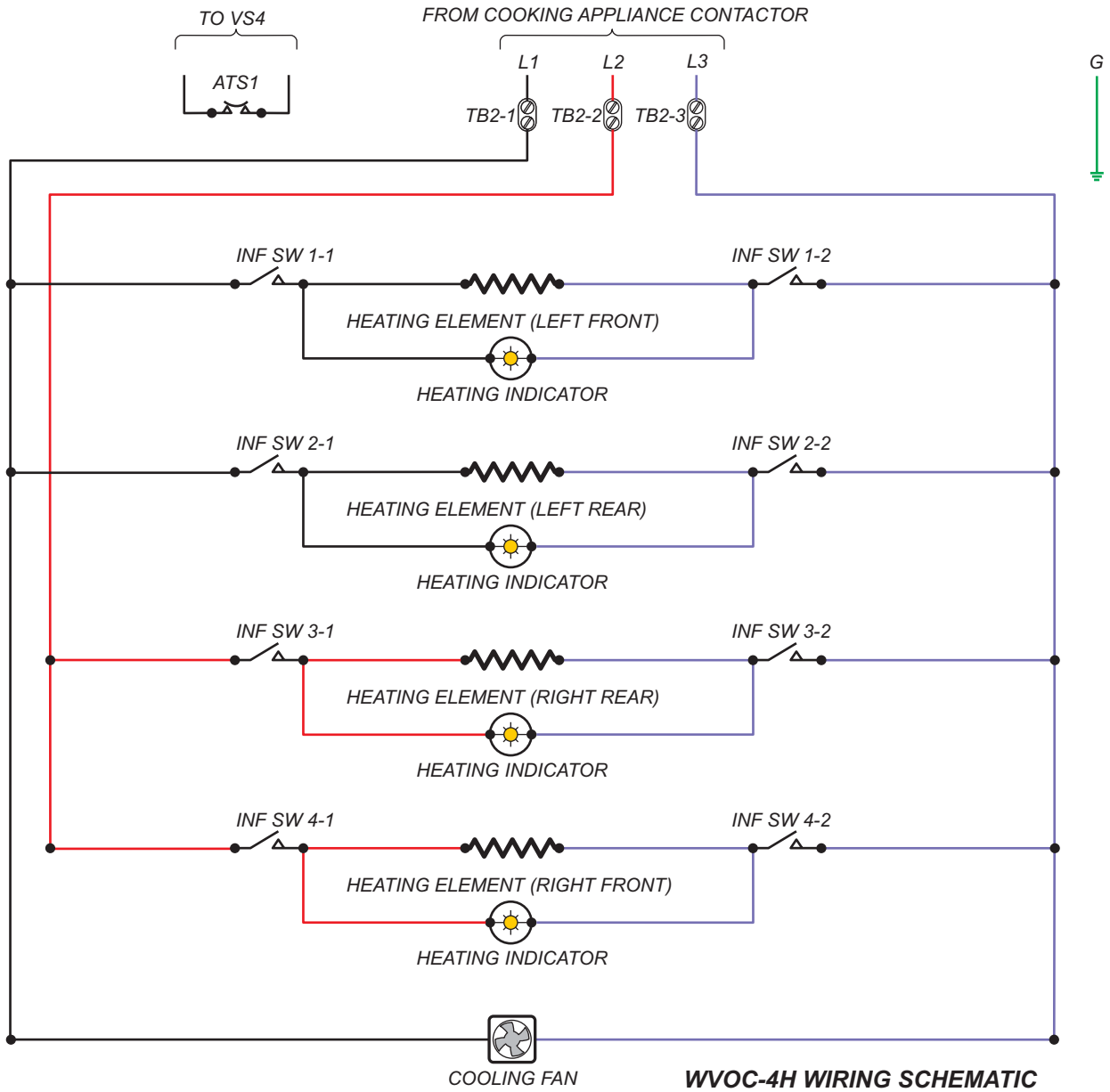
OVEN SECTION



NOTES:
1. Wiring diagrams show units with E-Safe II electronic relays.
2. For units with mercury relays or E-Safe I electronic relays, contact factory for appropriate wiring diagrams and/or conversion information.
3. Cooling fan for E-Safe II not used on all versions.

WIRING SCHEMATIC

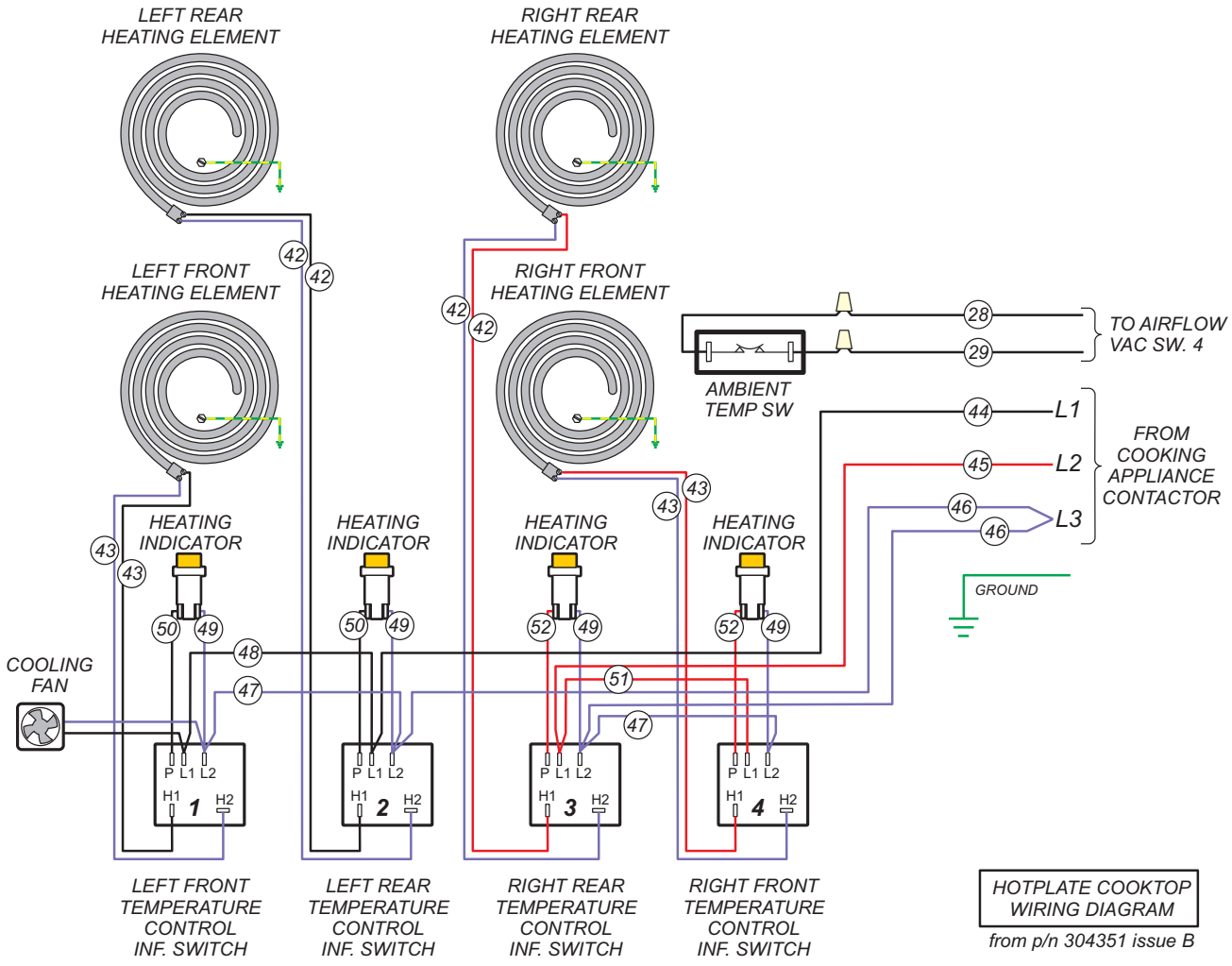
COOKTOP SECTION



WVOC-4H WIRING SCHEMATIC
HOTPLATE COOKTOP SECTION

LEGEND
ATS1 = AMBIENT TEMPERATURE SWITCH
CAC = COOKING APPLIANCE CONTACTOR
TB2 = TERMINAL BLOCK
VS4 = AIRFLOW MONITOR VAC SWITCH

COOKTOP SECTION



HOTPLATE COOKTOP WIRING DIAGRAM
from p/n 304351 issue B

MSDS - ANSULEX™ Low pH FIRE SUPPRESSION MEDIA

ANSUL® ANSUL INCORPORATED
MARINETTE, WI 54143-2542

MATERIAL SAFETY DATA SHEET

ANSULEX Low pH
QUICK IDENTIFIER (In Plant Common Name)

Manufacturer's Name:	**ANSUL INCORPORATED**	Emergency Telephone No.:	**CHEMTREC (800) 424-9300 or (703) 527-3887**
Address:	One Stanton Street, Marinette, WI 54143-2542	Other Information Calls:	(715) 735-7411
Prepared By:	Safety and Health Department	Date Prepared:	February 1, 1999

SECTION 1 - IDENTITY

Common Name (Used on Label): (Trade Name and Synonyms)	ANSULEX Low pH Liquid Fire Suppressant	CAS No.:	N/A
Chemical Name:	N/A This is a Mixture	Chemical Family:	Mixture
Formula:	N/A		

SECTION 2 - INGREDIENTS

PART A - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical and common name(s)):	Wt.%	CAS No.	ACGIH TLV	Acute Toxicity Data
None	N/A	N/A	N/A	N/A

PART B - OTHER INGREDIENTS

Other Component(s) (chemical and common name(s)):	Wt.%	CAS No.	ACGIH TLV	Acute Toxicity Data
Proprietary Mixture of Organic and Inorganic Salts	48.0 - 50.0	N/A	N/E	NDA
Phosphoric Acid	0.2	7664-38-2	N/E	NDA
EDTA	0.65	64--02-8	N/E	NDA
Yellow-Green Fluorescent Dye	0.011	518-47-8	N/E	Oral LD_{50}(rat) 6800 mg/kg
Water	Approx. 50.0	7732-18-5	N/E	NDA

SECTION 3 - PHYSICAL AND CHEMICAL CHARACTERISTICS (Fire and Explosion Data)

Boiling Point:	113ºC			Specific Gravity (H_2O=1):	1.33	Vapor Pressure (mm Hg):	Not Determined
Percent Volatile by Volume (%):	Approx. 50.0	Vapor Density: (Air = 1):	1.03	Evaporation Rate: (Butyl Acetate=1):	Approx. 0.005		
Solubility in Water:	100%			Reactivity in Water:	Mild exothermic reaction		
Appearance and Odor:	Fluorescent Yellow Colored Liquid, Mild Odor						
Flash Point:	None to boiling	Flammable Limits in Air % by Volume:	N/A	Extinguisher Media:	N/A	Auto-Ignition Temperature:	N/A
Special Fire Fighting Procedures:	NONE - THIS IS AN EXTINGUISHING AGENT						
Unusual Fire and Explosion Hazards:	None						

SECTION 4 - PHYSICAL HAZARDS

Stability:	Unstable ☐ Stable ☒	Conditions to Avoid:	N/A
Incompatibility (Materials to Avoid):	Reactive Metals, ClF_3, electrically energized equipment, any material reactive with water.		
Hazardous Decomposition Products:	Not established, acrid fumes.		
Hazardous Polymerization:	May Occur ☐ Will Not Occur ☒	Conditions to Avoid:	N/A

SECTION 5 - HEALTH HAZARDS

ANSULEX Low pH (continued)

Threshold Limit Value:	None Established
Routes of Entry: Eye Contact:	Irritant
Skin Contact:	Irritant
Inhalation:	Not an expected route of entry. Can be irritating to mucous membranes.
Ingestion:	Irritating to mucous membranes. Acute Oral LD_{50} (Sprague-Dawley rats) 825.5mg/kg.
Signs and Symptoms:	Acute Exposure: Material irritates skin, eyes, and mucous membranes. Chronic Exposure: None known.
Medical Conditions Generally Aggravated by Exposure:	None known.
Chemical Listed as Carcinogen or Potential:	National Toxicology Program: Yes ☐ No ☒ I.A.R.C Monographs: Yes ☐ No ☒ OSHA Yes ☐ No ☒

SECTION 6 - EMERGENCY AND FIRST AID PROCEDURES

Eye Contact:	Flush and irrigate with water for 15 minutes while holding eyelids open. If irritation persists, seek medical attention.
Skin Contact:	Wash thoroughly with soap and water. If irritation persists, seek medical attention.
Inhalation:	Fresh air if symptoms occur. If irritation persists, seek medical attention.
Ingestion:	Dilute by drinking large quantities of water.

SECTION 7 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type):	N/A		
Ventilation:	Local Exhaust: N/A	Mechanical (General):	N/A
Protective Gloves:	Rubber gloves for spill/leak	Eye Protection:	Chemical goggles recommended during spill/leak procedures.
Other Protective Clothing or Equipment:	Eye wash and safety showers are good safety practice.		

SECTION 8 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be taken in Handling and Storage:	Store in original container. Keep tightly closed. Keep separate from acid.
Other Precautions:	See incompatibility information in Section 4.
Steps to be taken in Case Material is Released or Spilled:	Stop leaks. Contain spills. Remove as much as possible. Place in closed container for proper disposal Wash spill area with large amounts of water to remove traces and neutralize.
Waste Disposal Methods:	Dispose of in compliance with local, state and federal regulations.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HAZARD INDEX

4 SEVERE HAZARD
3 SERIOUS HAZARD
2 MODERATE HAZARD
1 SLIGHT HAZARD
0 MINIMAL HAZARD

0 HEALTH
0 FLAMMABILITY
0 REACTIVITY

N/A = Not Applicable NDA = No Data Available N/E = Not Established

ANSUL and ANSULEX are registered trademarks.

Internet Address: http://www.ansul.com

ANSUL INCORPORATED, ONE STANTON STREET, MARINETTE, WI 54143-2542 Form No. F-90160-6
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WELLS BLOOMFIELD, LLC

VENTILATOR HOOD OWNERS MONTHLY INSPECTION LOG

Inspection shall be conducted on a monthly basis in accordance with the manufacturer's Operation Manual. At a minimum, this inspection shall include verification of the following:

OPERATION	AGENT / DATE												
Extinguishing system components: In proper place and (visually) in good order													
Manual pull station actuators for fire suppression system are unobstructed													
The maintenance log is in place and up to date													
No obvious physical damage or condition exists that might prevent operation of the fire suppression system													
The nozzle blow-off caps are in place and in good condition													
The hood, duct and protected cooking appliance have not been replaced, modified or relocated													
Clean plenum GREASE BAFFLE and BLOWER (max. interval: 3 months)													
Change PRE-FILTER and FILTER PACK (as required)													

This MAINTENANCE LOG is to be performed and completed by a trained technician who has completed the instruction necessary to perform the maintenance and recharge service.

WELLS BLOOMFIELD, LLC
VENTILATOR HOOD MAINTENANCE LOG

OPERATION		AGENT / DATE									
Clean and inspect discharge nozzle in plenum BEFORE filters Max. interval: 6 months											
Clean and inspect discharge nozzle in plenum AFTER filters Max. interval: 6 months											
Inspect fire suppression fuse links, all releasing devices for actuation, fire suppressant tank liquid level Max interval: 6 months (discharge of fire suppressant not a part of this test)											
Inspect fire suppression hoses, plumbing and tank for obstructions and any conditions such as, but not limited to, corrosion and pitting. Max. interval: 6 months											
Inspect and test all filter interlocks Max. interval: 6 months											
Replace two (2) fire suppression links in plenum: each link is rated @ 212ºF Max interval: 12 months	Log TEMP										
	Log Mfg DATE Stamp										
Replace fire damper fusible link: rated @ 280ºF Max interval: 12 months	Log TEMP										
	Log Mfg DATE Stamp										

THIS MAINTENANCE LOG MUST BE KEPT IN A PROTECTIVE COVER PERMANENTLY ATTACHED TO THE APPLIANCE
Log all repairs and recommendations on reverse side. Any repairs, other than replacement of factory authorized parts, to the fire suppression plumbing system must be subject to hydrostatic pressure testing.

IMPORTANT: WELLS BLOOMFIELD, LLC PROPRIETARY INFORMATION.
DISSEMINATION OF THIS INFORMATION TO ANYONE OTHER THAN
WELLS AUTHORIZED SERVICE AGENTS IS STRICTLY PROHIBITED.
TECHNICAL CONTENT OF THIS MANUAL IS DESIGNED FOR
USE BY QUALIFIED PROFESSIONAL TECHNICIANS ONLY.

CFESA

Wells Bloomfield proudly supports CFESA
Commercial Food Equipment Service Association

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